University of California, Berkeley West Side Study

CONSULTANT RECOMMENDATIONS

Sedway/Cooke

UNIVERSITY OF CALIFORNIA, BERKELEY

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BERKELEY, CALIFORNIA 94720

May 20, 1983

TO PERSONS INTERESTED IN THE UNIVERSITY OF CALIFORNIA'S WEST SIDE STUDY

We are pleased to enclose a copy of the final report of the West Side Study prepared by Sedway Cooke Associates, the University's planning consultant. This report, which represents the consultant's recommendations, is being sent to City of Berkeley officials, members of the community, University representatives, and other interested individuals.

The University will soon be preparing its own views on the consultant's recommendations and findings, and this University response will be sent to the City of Berkeley, as well as to other persons interested in the West Side Study. This response is expected to be available in two to three months.

The West Side Study was undertaken to help the University make decisions about the future use of its land in the context of both University and City needs The ideas and participation of affected groups and individuals were a critical part of the study, and the report would not have been possible without the dedicated involvement of individuals from the City, the community, and the University. Your participation in the study process has been extremely helpful to the University and is sincerely appreciated. We are looking forward to continued cooperation in working together with the City and the community in mutual planning efforts.

Yours Very Truly,

Ronald W. Wright
Vice Chancellor - Business
and Administrative Services

University of California, Berkeley
West Side Study

Consultant Recommendations
May, 1983

SEDWAY/COOKE
Urban and Environmental Planners and Designers

in association with

LYNN SEDWAY & ASSOCIATES
Urban Economists

PRC VOORHEES
Transportation

UNIVERSITY OF CALIFORNIA, BERKELEY
Harvey Helfand, Co-Project Manager
Department of Facilities Management
Dorothy Walker, Co-Project Manager
Chancellor's Office

STEERING COMMITTEE
Christopher L. Adams
Mary Ann Beach
Charles H. Bonno
Robert M. Glaeser
Sami Hassid
Harvey Z. Helfand
Thomas A. Koster
William Manning
Mary Reynolds
David E. Schlegal
Lisa Stephens
Connie Strauss
Michael Tietz
Dorothy A. Walker

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University of California, Berkeley
West Side Study

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I. INTRODUCTION

STUDY ORIGINS

Although existing side-by-side for more than 80 years, downtown Berkeley and the University of California campus have failed to achieve a mutually supportive functional and visual relationship. Past university, city, and private sector decisions have been made with little mutual consideration, often resulting in conflict as is currently evident along both sides of Oxford Street.

In February of 1981, the University of California authorized funding and selection of a consultant to conduct a planning and urban design study for the West Side of campus. The extent of the study area is shown in Figure 1. The university identified the following bases for the study in the request for services for the West Side Study:

- Need for more housing in Berkeley and the university's intent to provide more student housing.
- Possible need for new or replacement academic (instructional and research) space in the western portion of the central campus.
- Possible need for additional office space for the university systemwide administration and the Berkeley campus.
- Potential need for non-university office space.
- Need for increased tax revenues for the city through economic development in the downtown area.

The West Side Study was seen as a means to explore how related development of the university, city, and private properties could be used to increase housing, to expand demand for commercial activities to serve the resident and working population of the area, and to provide a more effective transition and linkage between the downtown area and the campus. The study was also seen as a means to provide the basis for discussion among all concerned parties, consider alternative possibilities for development of the interface area, and develop recommendations and illustrate specific development alternatives.

Following a review of qualifications and proposals for services from a number of consulting firms, Sedway/Cooke, urban and regional planners and designers, in association with Lynn Sedway & Associates, urban economists, and P.R.C. Voorhees, transportation consultants, were selected by the university to undertake the West Side Study.

STUDY PROCEDURES

The study consisted of four major phases. The first identified major issues in the area and assembled land use, transportation, urban design and economic information documenting existing conditions and principal development and conservation issues. This was followed by an exploration of options for downtown Berkeley and for specific sites and areas, on- and off-campus, for which change could be anticipated. The next step involved assessment of these choices to provide a better understanding of the economic, transportation, land use, aesthetic, and social implications. The last step in the program has been the preparation of findings and recommendations which are set forth in this report. These findings include the following:

1. Overall objectives which embody both university and community aims identified during the course of the study.

2. Specific objectives and guidelines for future land use, transportation, and urban design actions in the west side.

3. More detailed documentation of development options for critical sites throughout the study area which are judged to be both feasible and desirable.

This present document represents the final recommendations from the consultant for achieving the identified university, city, and community objectives.

In order to ensure that community opinions and objectives would be considered as a basis for the study recommendations, a public participation process was initiated at the start of the study. A Study Advisory Committee comprised of approximately 60 individuals representing various interest groups in the study area was formed and met at critical phases of the program. Their participation was supplemented by a series of advertised community workshops which were held to expand public participation and broaden the exposure and responses to the study. A general mailing list was also maintained by the university and periodic information reports mailed to keep the public informed and aware of the progress of the study. A summary of the participation process is attached in Appendix C and a list of the members of the Study Advisory Committee in Appendix D of this report.

The final step in the community participation process was public distribution of the draft report and the holding of two public workshops. The first workshop served as an information session to explain the draft report and answer community questions. The final workshop reviewed the report and recorded public evaluation and responses to the report recommendations. The conclusions of this last workshop may be found in Appendix C of this report. Additional responses will be sought by the university from the city, local residents and business persons, community groups, and campus and systemwide representatives following distribution of this report.

REPORT ORGANIZATION

The West Side Report summarizes the findings of the study and presents the consultant's recommendations to the university. The report is organized into three major sections. This section, Chapter I, in addition to presenting the purpose for the study and description of study procedures, includes a summation of major study findings and recommendations. Chapter II contains a description of background conditions, both existing and projected, which must be recognized and will influence the choices to be made by the university, city, and private interests. Included are: a summary of existing land use; the ownership, parcelization and utilization of land; building characteristics including historic value; economic and market conditions influencing housing, office and retail investment, and construction decisions; and an identification of the land supply susceptible to change within the west side. The final portion of this Chapter provides a summation of major study findings and recommendations.

Chapters III and IV set forth the findings and recommendations for the west side and the subareas which comprise it. It is important to note that the report is not a plan. Rather, it is intended as an aid to the university in its campus and facility planning. Two major aspects are addressed. First, the downtown and the west side of campus are addressed as a unit. This provides the university with a basis for contributing to the city's downtown planning and urban design efforts in a way that will clarify and establish community objectives for downtown. Thus, the university should be able to make decisions for its west side properties in a manner that is complementary to and consistent with community objectives. Second, specific sites with development potential are investigated to determine their possible use and compatibility with campus and downtown planning and design objectives.

Chapter III presents broader recommendations for the entire west side. Included are suggested university and community objectives that have been the subject of public review throughout the west side planning process. These objectives provide the basic foundation for the balance of the report recommendations. The objectives are followed by proposed areawide land use, transportation, and urban design recommendations and proposals.

Chapter IV addresses specific sites or groups of sites where reinvestment, either in new construction, rehabilitation or reuse, is anticipated or possible. For the most part, the sites discussed are university-owned. However, other contiguous public and private lands are also included in order to address coordination issues, land assemblage prospects, and interrelated economic, fiscal, visual, and traffic concerns. The first portion of this chapter discusses developmental roles the university can perform in the west side. The remainder of the chapter identifies development options for specific sites and discusses the economic and planning implications of the choices.

Additional background information is appended to the report which documents analyses underlying the recommendations and which summarizes community responses to the report recommendations. Briefly these materials consist of: Appendix A, traffic analysis of circulation options for downtown; Appendix B, financial assessment of development options considered; Appendix C, a summary of the public participation program and the responses received in the final December 9, 1982 community workshop; and Appendix D which identifies the members of the the Study Advisory Committee.

II. BACKGROUND CONDITIONS

INTRODUCTION

The future of the West Side Study area is dependent upon many factors. Prior city, university, and private sector decisions, as well as citywide and regional economic and population trends present obstacles to and opportunities for achieving university and community objectives. In order to understand the implication of these factors documentation of existing conditions was undertaken during the intial phase of the West Side Study. Existing conditions analyzed include: existing land uses, transportation and traffic conditions, design features and the condition of buildings and related public spaces, the ownership of land, and the economic utilization of land. Market conditions and market trend analyses and a compilation of possible university space requirements were also undertaken.

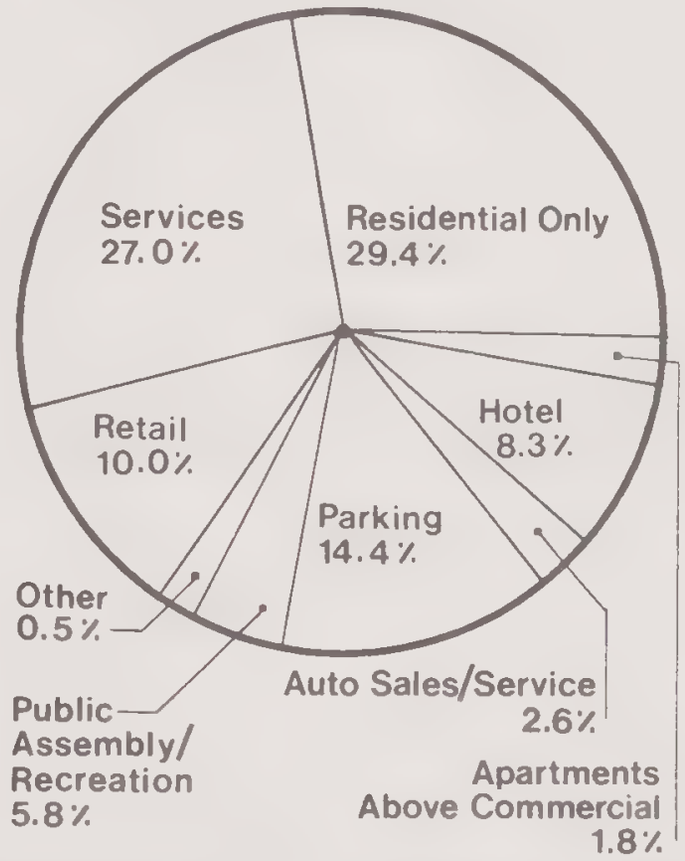
A synopsis of these studies is provided in this chapter as a basis for understanding the recommendations contained in this report. An indepth analysis of the existing conditions can be found in University of California West Side Study, Phase I Summary Report, January 18, 1982, and in Appendix A and B of this report.

EXISTING SETTING

EXISTING LAND USE

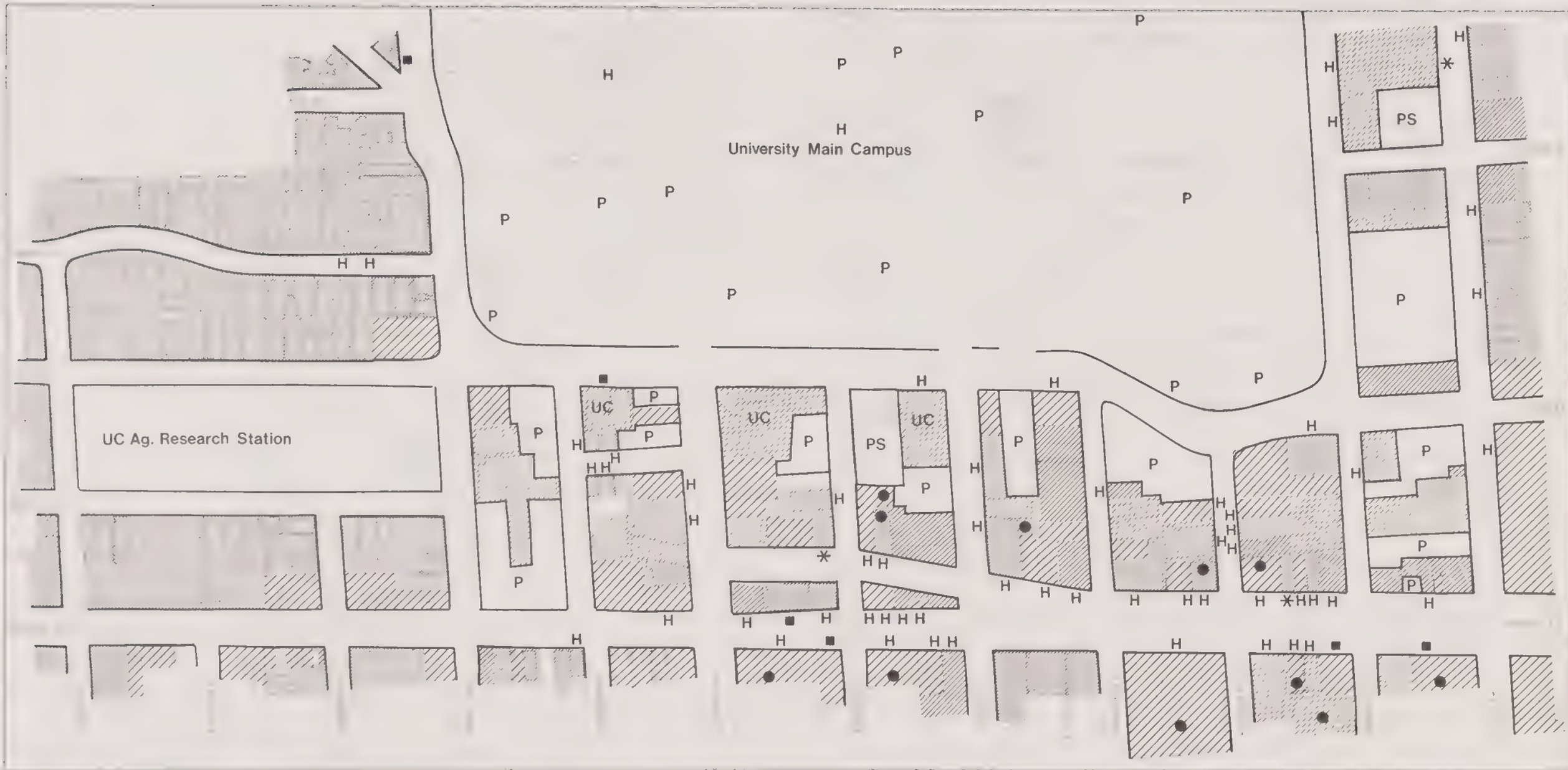
Figure I shows the distribution of land use in the study area. Land uses are grouped under the general categories of residential, retail, office, cultural, and parking. Mixed land uses, those with retail uses on the ground floor and office uses above, and with residential uses integrated above retail or office, are indicated separately. This vertical integration of uses in the study area represents an important resource that contributes to downtown Berkeley's vitality and convenience. Mixed land uses in the study area are responses to both market conditions and city development regulations.

Of the total floor area in the study area, 31.2 percent is residential, 27.0 percent professional and financial services, 14.5 percent parking, 10.0 percent retail, 8.4 percent hotel, 5.8 percent public assembly or recreation, 2.6 percent auto sales and service, and 0.5 percent other.



DISTRIBUTION OF FLOOR AREA BY USE

Excluding buildings that are solely residential in use (located primarily in the northern and southeastern portions of the study area), the predominant downtown ground-level uses are retail (28 percent) and personal or



Residential

Retail

Office

Retail/Office Mix

Upper Floor Residential

Governmental, Educational, Quasi Public, Cultural, Entertainment

PS Parking Structure

P Surface Parking

LANDMARK BUILDINGS

Source: Berkeley Architectural Heritage Association

* Berkeley Local Landmark and National Register of Historic Places

■ Berkeley Local Landmark

H Eligible for National Register of Historic Places

FIGURE 1

EXISTING LAND USE AND HISTORIC RESOURCES

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professional services (20 percent) in the form of small shops and offices of less than 2,000 square feet of floor area. Parking comprises a full 23 percent; financial services (primarily banks and savings and loans) and auto sales and service each comprise about 6 percent. Public assembly (primarily theaters) and recreational facilities, such as the YMCA, together account for 9 percent. The remainder is fairly evenly distributed among public and educational facilities, hotels, service stations, and warehousing.

In the upper levels of downtown buildings, the primary uses are professional, business, and financial services (50 percent). Hotels comprise 21 percent, parking in structures 19 percent, apartments 5 percent, and public assembly and recreation combined 5 percent. There are approximately 500 hotel rooms and 150 apartment units in the upper stories of downtown structures. There is a total of approximately 1,450 units in buildings that are solely residential in use. These buildings are located primarily in the northern and southeastern portions of the study area. Of these residential units, over 93 percent are apartments, 5 percent flats or duplexes, and 2 percent single family.

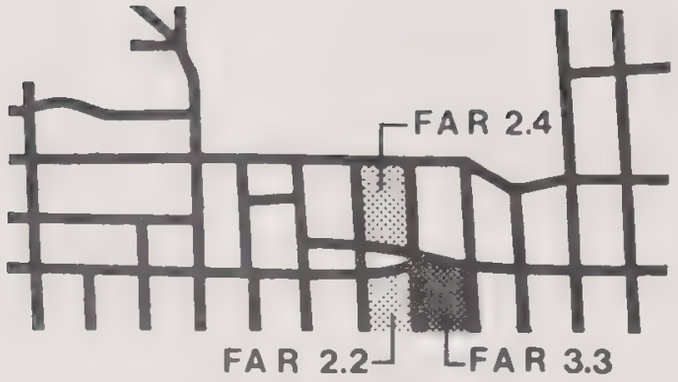
The allowable Floor Area Ratio or FAR (the ratio of floor area to parcel area) in the central downtown area (C-2 District), bounded by Oxford, Milvia, Hearst and Durant, under current zoning is 6.0 subject to approval of a use permit and 4.0 without a use permit; maximum permitted building height is 100 feet. (The C-2 District extends south of the study area to Parker Street along Shattuck Avenue and west to Grove Street between Center and University.) Permitted uses in the C-2 District include commercial, retail, and office establishments, as well as residential units. The city has no designated parking requirements for uses in the C-2 District. The development of parking lots and structures designed to serve a commercial or office use and containing more than five cars require use permits.

LAND UTILIZATION, OWNERSHIP, AND PARCELIZATION

Land utilization characterizes the investment in existing site improvements. It documents the ratio of the assessed valuation of improvements to the assessed valuation of land for privately owned parcels in the study area (derived from Alameda County Assessor's Records, updated in 1981). This ratio is an indicator of the economic potential for redevelopment of a parcel. The lower the ratio the more likely there is to be pressure for redevelopment to a higher intensity of use. Parcels for which the ratio is less than 1.0 (that is, for which the value of the structure or other improvements is less than that of the land itself) can be thought of as underutilized from an economic perspective. Market forces will press for more intensive use. Where the ratio is greater than 1.0, there will be less pressure for change. University-owned land which has been proposed or considered as possible building sites or for expansion or reuse can be thought of as underutilized in that it is likely to experience a change in use.

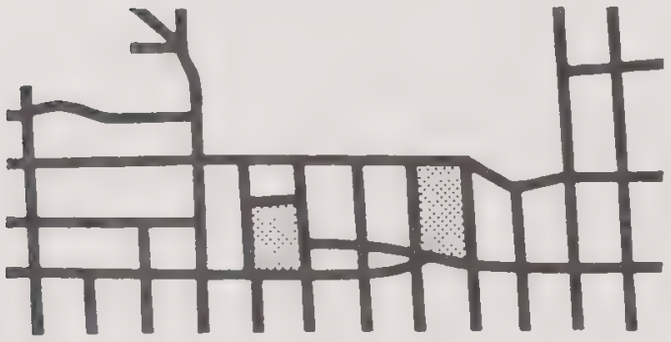
By these definitions, the majority of land area in the study area, excluding the campus, is underutilized and subject to development pressure (see Figure 2).

Another measure of land utilization is the allowable FAR. When parcels are aggregated at the block level and parking is included as a use, only the block southwest of Shattuck and Center (which contains the Great Western Savings Building) reaches 55 percent of this limit or an FAR of 3.3. Two blocks achieve an aggregated FAR of between 2.0 and 2.5: the block northwest of Shattuck and Center and the block northeast of Shattuck and Addison which contains University Hall. The FARs of other blocks in the downtown area range from 0.7 to 1.8. The downtown average is 1.5 or 25 percent of the maximum possible under current zoning.



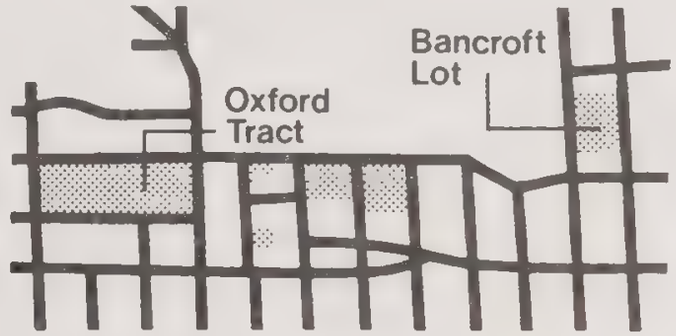
BLOCKS HAVING FAR OVER 2.0

Contiguous ownership, especially when it is a recent occurrence, may indicate that parcels are being aggregated for development or redevelopment. Properties in the block southeast of Shattuck and Center have been consolidated by a single party quite recently suggesting that there may be plans for redevelopment. In contrast, the block northeast of University and Shattuck is owned in large part by a single party but has been for some time, so that it cannot be inferred that redevelopment is likely. There is also a significant number of contiguously owned parcels in the blocks northeast of Shattuck and Hearst, southeast of Shattuck and Durant, and southeast of Fulton and Durant.



PRIMARY BLOCKS WITH
CONTIGUOUSLY OWNED PARCELS

The University of California is the largest single landowner in the study area, even when the central campus is excluded. Net utilizable floor area owned by the university in the study area includes approximately 872,660 assignable square feet (ASF) on campus and 175,231 ASF plus the 75,600 gross square foot parking structure off campus, as determined by the university. Two large undeveloped or partially developed areas of university-owned land are the Oxford Tract of which 2.5 acres are used for experimental agriculture and the block southwest of Fulton and Bancroft of which the 2.8 acres owned by the university are used for parking and recreational facilities. Other major parcels are located along the west side of Oxford and occupied by the Central Garage facility, University Hall, a parking structure, and the Printing Department.



UNIVERSITY HOLDINGS

SUSCEPTIBILITY TO CHANGE

To characterize the susceptibility to change in the study area, the preceding measures of land utilization, parcelization and ownership, and building characteristics have been combined on a single figure. Figure 2 distinguishes between significantly underutilized land resources and moderately underutilized. In the former category are vacant parcels, parcels utilized for surface parking indicating a minimal investment, land resources with a

Significantly Underutilized
- vacant
- surface parking
- land utilization ratio less than 0.50
- sizeable aggregations
- U.C. sites/properties in surface parking

Moderately Underutilized
- land utilization ratio less than 1.00
- U.C. sites/properties less intensively utilized than development potential warrants

Economically Underutilized
- buildings of recognized or potential historic value (Historic evaluation by BAHA)

FIGURE 2

SUSCEPTIBILITY TO CHANGE

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0 50 150 feet

net utilization ratio less than 0.5, or sizeable land holdings under a single owner. Since a number of these areas remain in highly fractured ownership, this measure can not be directly interpreted as imminently developable. Instead, it is an indirect measure of the economic propensity to change.

The second category, moderately underutilized, represents land resources with a net utilization ratio less than 1.0 (twice the capital improvements of those in the former category), and all university sites presently developed or utilized marginally. This category includes the Oxford Tract. The entire Oxford Tract presently supports the teaching and research activities of the College of Natural Resources. This large tract of land, under one ownership, represents a key opportunity to achieve a number of university objectives whose benefits must be weighed against its present use or future utility as a location for expanded academic space.

A review of the susceptibility to change indicates there is substantial underutilized land in downtown Berkeley. Table I compares the available land supply for a development intensity of FAR 4.0 (presently permitted by right) and the supply for a development intensity of FAR 6.0 (permitted with conditional use), for the significantly underutilized land resource and for the moderatly underutilized land resource. The table shows that there is substantial opportunity to accommodate the market demand for downtown Berkeley providing institutional barriers, parcelization problems, and parking problems can be overcome.

If important community objectives are to be achieved without adverse loss of existing resources or potentially achievable assets, it is clear that private and public interests need to work in concert. For example, a significant percentage of the architectural historic resources are presently economically underutilized and susceptible to change. (See Figure 2.) Not all of these resources,

TABLE I

COMPARISON OF AVAILABLE LAND SUPPLY AT TWO DEVELOPMENT INTENSITIES FOR UNDERUTILIZED LAND RESOURCES
(in gross square feet)

	Acres	Ground Floor (in 1000's sq. ft.)	TOTAL DEVELOPMENT POTENTIAL FAR 4.0 (in 1000's sq. ft.)	FAR 6.0 (in 1000's sq. ft.)
Significantly Underutilized (0.00 to 0.50 Ratio)				
Private Properties	16.87	735	2,939	4,409
Bancroft Lot	2.80	122	488	732
U.C. Garage	0.32	14	56	84
U.C. Printing Plant	0.60	26	104	157
Univ. Hall Parking Lot	0.25	11	44	66
Public Health Parking Lot	1.23	53	211	316
City Surface Parking Lot	1.05	46	182	273
SUBTOTAL	23.12	1,007	4,024	6,037
Moderately Underutilized (0.51 to 1.00 Ratio)				
Private Properties	7.16	312	1,248	1,871
Oxford Tract	6.20	270	1,080	1,620
U.C. Parking Structure	0.58	--	25	50
SUBTOTAL	13.94	582	2,353	3,541
TOTAL	**37.06**	**1,589**	**6,377**	**9,578**

Source: Sedway/Cooke

however, are necessarily in jeopardy. Several structures identified by BAHA (Berkeley Architectural Heritage Association) as eligible for designation as historic resources are woodframe 2 or 3 story Victorians; many set back from the existing street wall with remodeled store fronts. These particular structures can be economically moved to other sites outside the central core of the downtown. Other potential historic resources might be retained by incorporating existing facades or interior features into new structures (such as the spiral staircase at the U.C. printing plant). Specific recommendations for preserving Berkeley's architectural heritage are included in the Urban Design Concepts located in Chapter III. Mechanisms for protecting these resources to the maximum extent feasible will require the coordinated effort of property owners, the city, and the university.

TRANSPORTATION FACILITIES AND OPERATIONS

The majority of people commuting in and out of, as well as within, Berkeley use the private automobile. Sixty-four percent of the total number of individuals working in Berkeley drive to work alone. Of the 65 percent that both live and work in Berkeley, 63 percent drive to work alone. As a result of the high level of reliance on the private automobile, traffic congestion is a significant problem in the study area.

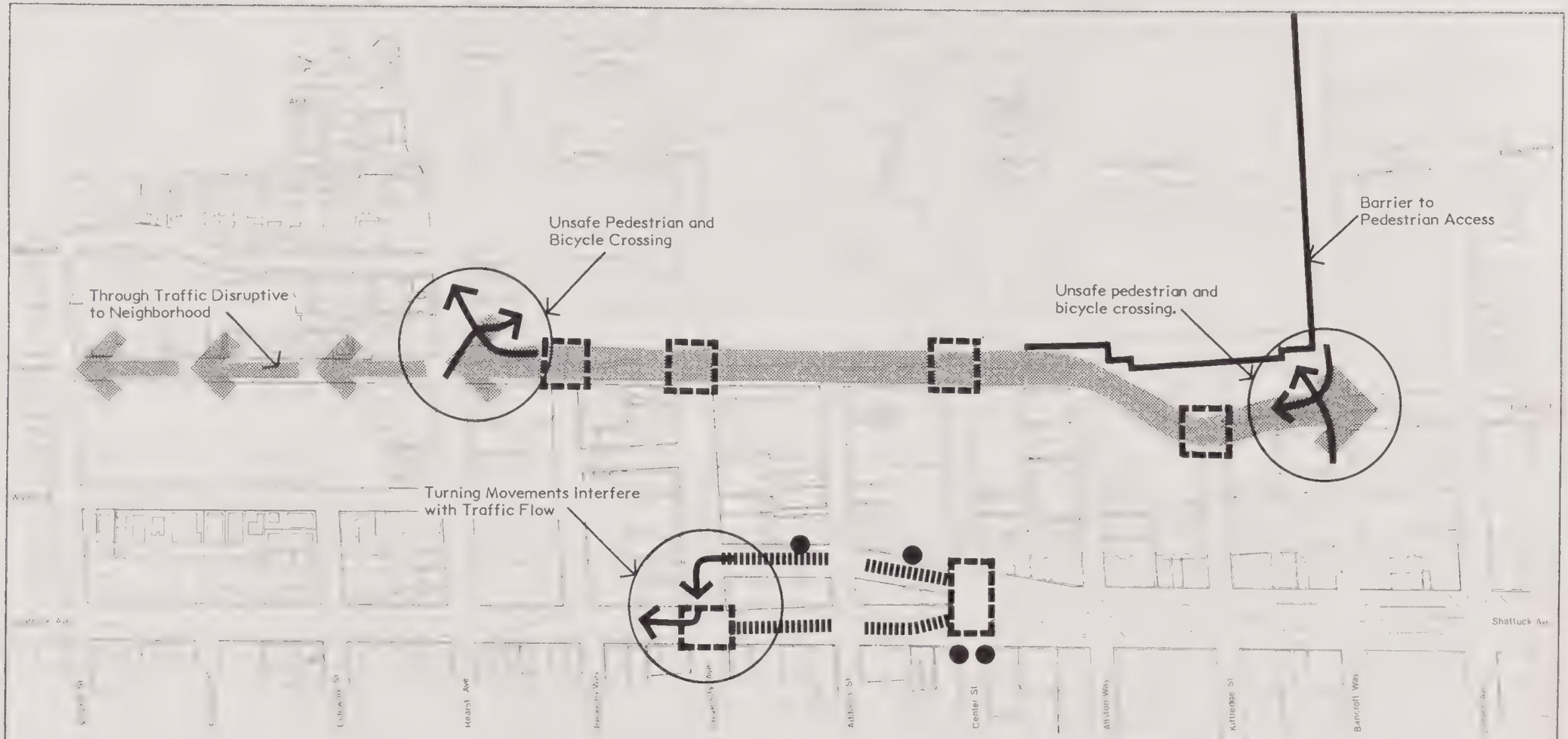
Utilizing the market demand through 1995 for additional development in the downtown to make a projection of the possible increase in traffic, a number of scenarios were evaluated to assess the resulting impact on the roadway circulation system. (See Appendix A for an assessment of alternative traffic modifications.) The most critical intersection in the downtown is the functioning pair at University Avenue and Shattuck Avenue/Shattuck Square. These two signalized intersections essentially operate as one. Presently, they are operating at Level of Service D/E, indicating that traffic congestion is near capacity. (Level of Service D is representative of peak hour conditions in many urban areas where drivers on some approaches have to wait through more than one red cycle before proceeding through the intersection.)

The capacity of the intersection, however, is seriously constrained by conflicts with slow moving buses making frequent stops and negotiating the complex turning movements in their north-bound direction along Shattuck Avenue. In addition, capacity at this intersection is reduced because of conflicts between moving cars and cars utilizing the adjacent curb-side parking.

The study area is well served by public transit including Bay Area Rapid Transit (BART) connections to regional destinations, Alameda-Contra Costa Transit service to San Francisco and destinations in the East Bay, and local university-provided transit services (e.g., Humphrey Go BART).

The existing service represents a significant circulation resource to the study area. At the present time over 21 percent of all work trips generated by employment in downtown Berkeley are on transit. This is substantially above the national average but still below the city's transit ridership potential.

Though there are designated bicycle routes through the study area, travel efficiency necessitates the use of most streets by cyclists. Portions of the study area also attract substantial pedestrian activity. At present the major intersections that provide bus stops or critical transfers in the public transit network show the greatest impact from the concentration of pedestrian activity. At a few of these points pedestrians overfill the available space on the public sidewalks and spill into the roadway. The pedestrian traffic generated by the location of bus stops and transfer points presents a secondary impact by interfering with the free flow of traffic. There is insufficient "green light" time at the Shattuck/Center intersection to allow the number of pedestrians exiting the



Pedestrian Conflict with Traffic Movement

Street Parking and Bus Stops Restrict Traffic Movement

Lack of Sidewalk Space for Transit Patrons

Conflicting Through Vehicular Movement [Excessive Vehicular Speed]

FIGURE 3

CIRCULATION CONFLICTS AND CONSTRAINTS

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0 50 150 feet

BART station to cross Shattuck on the way to locations east of Shattuck and especially the university. And the monumental width of Oxford Street and the speeding traffic presents a substantial barrier to the pedestrian connection between the campus and regional transit services.

TABLE 2

WEST SIDE PARKING INVENTORY

	In Structure	Off-Street Surface	On-Street
Downtown Area			
private/assigned	350	939	0
public/city-owned	985	132	800
university faculty /staff	252	254	0
Subtotal	1,587	1,325	800
Campus Area			
university faculty /staff	0	430	91
service	0	0	48
motorcycles	0	14	0
Subtotal	0	444	139
TOTAL	**1,587**	**1,769**	**939**

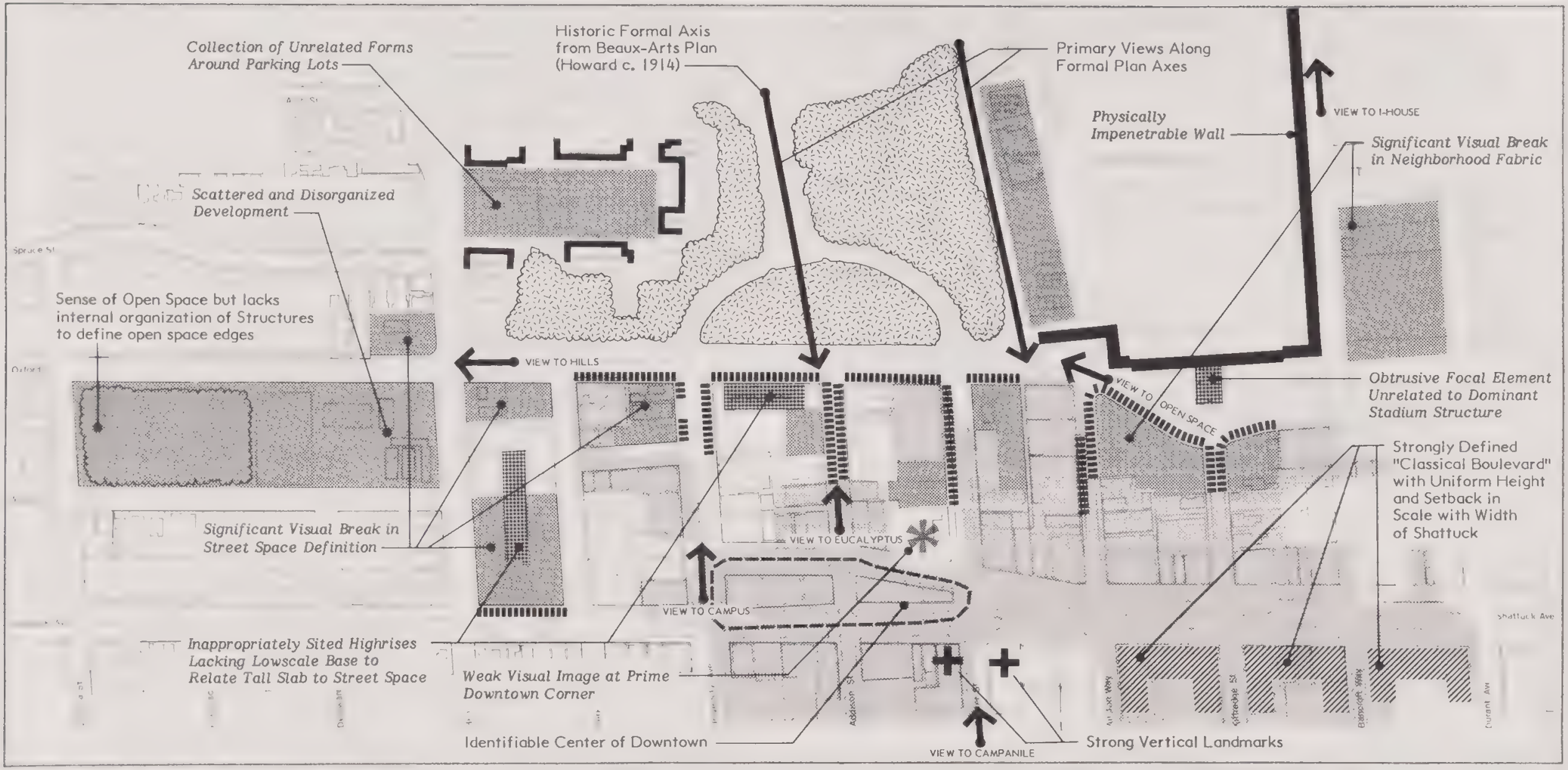
Parking is presently dispersed throughout the study area. On campus, numerous surface parking lots are scattered along the roadways throughout the visually significant open spaces. Other lots occupy key focal points within building courtyards. Within the downtown, off street parking presently provides 75 percent of all the places. The remaining are mainly short term, metered spaces along the street sides. A major conflict arises between the demand for short-term parking convenient to the shopper, and long-term parking required by the office commuter. Table 2 provides an inventory of parking facilities within the study area.

In the downtown, nearly 15 percent of the land area excluding streets is devoted to automobile storage. A preponderance of scattered surface lots results in the fragmentation of the commercial street facade that has two major negative effects. First, it results in discontinous retail frontages which diminish the pedestrian quality and consequently the comparative advantage of the shopping district. Second, the "holes" in the urban fabric that result from the scattered lots detract from the appearance of the downtown.

Figure 3 identifies the major circulation conflicts and impediments to safety. Key design issues arise from the conflicts between pedestrians and traffic and the opportunities inherent in improving the traffic capacity of the study area through a resolution of conflicts between autos/buses and parked cars in the two blocks between Center and University along Shattuck Avenue and Shattuck Square.

URBAN DESIGN AND VISUAL CHARACTERISTICS

The majority of structures in the downtown area, bounded by Oxford, Milvia, Hearst, and Durant, are concrete, brick or steel frame-fireproof construction. More than half of the concrete structures are reinforced. Most of the residential structures north and south of the downtown area are of woodframe construction.



Key Opportunity Sites

Major Landscape Features

Concentration of Historic Resources

Broken Street Facade or Interrupted Retail Frontage

← Significant Views

FIGURE 4

DESIGN ASSETS AND LIABILITIES

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West Side Study

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0 50 150 feet

The predominant height throughout the study area is one-to-two stories (11 to 32 feet). Two-to-three story structures (33-42 feet) are most common in the residential area north of the campus and downtown area with a scattering downtown. The few three-to-four story (43 to 52 feet) and four-to-five story (53 to 66 feet) structures are in the downtown area. Of the six structures taller than five stories (67+ feet), four are downtown and two on campus in Precinct 5. Most of the other structures in Precinct 5 are four-to-five stories.

The status of buildings as historic or architectural landmarks is derived from the records of the Berkeley Architectural Heritage Association (BAHA). Three structures in the study area are listed on the National Register of Historic Places. An additional five structures as well as the three National Register buildings are designated as Local Landmarks by the Berkeley Landmark Preservation Commission. Another 36 structures are eligible for this designation, according to evaluations by the BAHA. (See Figure 1.)

Placement on the National Register permits federal and state tax advantages and eligibility for grants and loans to finance restoration. Designation as a Local Landmark requires a delay of one year, following a request to demolish the structure, to allow for the exploration of alternatives by those interested in preserving the structure.

The major design assets and liabilities within the study area are diagrammed on Figure 4. The figure identifies major assets to protect such as the concentration of historic resources and the primary views from the campus or onto the campus. Major problems to be addressed, such as the broken street facade and interrupted retail frontage, are also shown. The figure identifies strong design elements, such as the vertical landmarks of the towers at Shattuck Avenue and Center Street, and contrasts them with the visually weak image that results from the significantly underutilized Bank of America site. In all, this evaluation of existing conditions sets a vocabulary for the recommended design changes to the study area.

PROJECTED DEMAND FOR LAND AND BUILDING SPACE

UNIVERSITY PRIORITIES AND SPACE NEEDS

During the course of the West Side Study, a survey was made of all existing university space resources including buildings on campus, buildings and lands off the main campus but owned and operated by the university, and space leased in the study area by the university. They were categorized by the type of use and included: housing, parking, administrative space, academic and research space, and recreation and open space. The Department of Facilities Managment prepared an assessment of the existing plans and programs for each of these space resources and compiled the assessment in a table that ranks these plans and programs by distinguishing among:

A: Well established campus (or university) priority and need

B: Campus (or university) need identified and established

C: Campus (or university) priority not established.

Table 3, at the end of this chapter, illustrates the existing status of plans and programs for each of the space resources connected with university activities. At the bottom of the matrix, are a number of identified university space needs that are not geographically linked to specific sites, including:

computing facilities
museum exhibit space

facilities management staging area
business administration building
low vision clinic, School of Optometry
university administrative and student services
conference facility
student housing
faculty housing
food services
fleet vehicle service and storage
university extension
sports/cultural pavillion
research center

In order to more specifically relate the space needs to the potential development opportunities in the West Side Study area, the generalized need was categorized into the following four major uses: student and faculty housing, academic uses, administrative uses, and ancillary support services. (Open space resources and needs were included in the assessment of physical characteristics and design resources.) The analysis of needs is more fully documented in the Phase I Summary Report of the West Side Study, however, the major findings are included here. While the demand for space to meet projected university requirements cannot be entirely directed to the West Side Study area, the composite needs analysis provides a framework by which to measure the opportunities to meet university needs in the west side and ultimately, the appropriateness of meeting those needs there.

STUDENT AND FACULTY HOUSING. The assessment of need is based on the adopted university policy to maintain a steady-state campus enrollment of 28,250 students to stabilize the student housing demand. (Office of the Chancellor, Housing Policies for the 1980's.)

- Adopted University Student Housing Policy is to provide a total for all campus sites of 2,850 beds (2,000 as quickly as possible). Under the guidelines developed for housing units, this need will generate a demand for 712 apartment type units averaging 1,000 square feet per unit.

- Current plans for the renovation of the former Schools for the Deaf and Blind at Dwight-Derby would provide for 740 student beds, less than 25 percent of the identified student housing need.

- Adopted University Housing Policy is to provide a total of 42 "junior" faculty housing units, in an apartment type configuration, averaging 1,000 square feet per unit.

- Current plans for the renovation of the former Schools for the Deaf and Blind at Dwight-Derby would provide up to 20 faculty units.

ACADEMIC OR RESEARCH USES. The plans to increase academic space are a result of a number of serious facility deficiencies that affect most of the academic units on campus and are not from an expected increase in student population. Obsolete laboratories and other research spaces, existing "doubling-up" for many faculty office spaces, and shortages of up-to-date service areas for the increasingly complicated technical facilities all contribute to the estimated need for academic space. Limited by state funding prospects, only a few of the identified needs have the status of specific development programs.

- The university is presently developing a program for an organismal biology building, a genetics and plant biology building, and renovation to the Life Sciences Building. Possible expansion of laboratory and research space will result in an increase of 225,448 square feet of assignable space. (360,000 gross square feet.) Current plans provide for accommodating these new facilities on the main campus within the West Side Study area.

- A new structure to house the graduate School of Business Administration is expected to require up to 100,000 assignable square feet. The structure could be located in the West Side Study area.

- There is a well established need to maintain convenient open space reserved for plant biology research as presently provided on the northern portion of the Oxford Tract.

- There is a well established need to maintain the CNR biosciences research facilities presently provided in the green house facilities on the south portion of the Oxford Tract.

- A potential need for a new or remodeled structure in an urban setting convenient to mass transit services has been identified for a low vision clinic operated by the School of Optometry. The downtown portion of the West Side Study area is conceivably a suitable site though other sites further from campus are under consideration.

- There is an unidentified but potential need to expand the facilities for the School of Public Health located in the West Side Study area. Adding an additional wing to Warren Hall is a possible means of meeting this need. No specific building program has been developed.

- There is a potential need to expand the facilities for a relocated department of Genetics to Mulford Hall. Options include adding an additional floor or wing to Mulford Hall. No specific building program has been developed.

- There is an unidentified but potential need to provide increased museum exhibit space, particularly for the collections of the various sciences. No specific location or building program has been developed.

UNIVERSITY ADMINISTRATION.

- Systemwide administration, presently concentrated in University Hall, opposite the Crescent on Oxford, is currently reviewing its space requirements. It has a lease agreement with the developer of the Berkeley Tower site at University Avenue and Shattuck Square. This additional space is expected to be adequate or in excess of current needs.

- The university has identified a projected need for 116,000 square feet of assignable space to meet the needs of campus administration and public services. This demand could be located in the West Side Study area.

- An increase in food services space requirements is expected to result from relocation of laboratory and teaching space into the northwest corner of the main campus as part of the biological sciences building program. No specific program has been developed.

- Student services space requirements are expected to increase. No specific location or building program has been proposed. These services could be located in the West Side Study area, especially with an increase in student population in the west side as a result of possible student housing programs.

- There is an identified need for a Facilities Management Staging area. Space beneath the Edwards field bleachers is presently used but inadequate.
- There is an identified need for 18,000 square feet of assignable space for Computing Affairs. This use will displace the University Extension function at the Fulton Street location.

- The printing department presently utilizes a structure at the corner of Oxford and Center. This site has been identified in the West Side Study to be

underutilized. The printing services do not have to be located in the highly accessible area of downtown Berkeley.

- The university fleet of vehicles are serviced at the UC Garage and stored within the West Side Study area. A change in use for the UC Garage or changes in the policies regarding surface parking of vehicles in the Crescent area would require a replacement for these facilities.

UNIVERSITY SUPPORT FACILITIES.

- The University Extension has identified a need for a minimum of 5,000 square feet of flexible classroom space as part of a potential conference facility. It is expected that such a facility, in conjunction with a hotel, could generate additional utilization by academic units on campus if conveniently located in the downtown area.

- The University Extension will vacate its facilities on main campus requiring a new location for 17,000 assignable square feet of space. The West Side Study area is a preferred location for this use.

- The university has recognized the need to replace surface parking with additional commuter parking. The adopted Housing Policy provides that commuter parking facilities should be incorporated into the parking programs of any new student housing projects if the site is adequate.
- No increase in staff parking is envisioned by the university. Retaining the existing amount of staff parking, however, should be considered a priority. Any spaces lost due to changes in use or other parking restrictions in the West Side Study area should be replaced.

- An addition to the heating plant to house a cogeneration facility has been programmed.

- A potential need for a sports/cultural pavilion has been identified. Though accessibility to BART and minimization of traffic impacts suggests that the Bancroft Lot may be a suitable site, the West Side Study area is not the site preferred in the sports and recreation task force findings.

PRIVATE MARKET DEMAND

The economic outlook for downtown Berkeley is positive. Demand for office space is strong and retail business is good, in part as a result of increased office uses. There is potential for limited development of market-rate condominiums in the study area.

At present the office space demand and retail market appear mostly local rather than regional. Most current office demands stem from firms seeking space near the university or providing local services. The scarcity of land and parking in downtown Berkeley will limit future office development. Increased retail strength is anticipated to result from office growth, as well as other factors, increasing the potential for a more vital and attractive downtown retail center.

General conclusions drawn from an analysis of economic and market factors can be separated into the following major categories.

OFFICE SPACE. ABAG's projection for regional employment growth from 1975-2000 has increased about 40 percent from the 1979 projections used for the Phase I Report. Such projections are estimates only. Employment growth depends upon many factors, including corporate relocation decisions, office space availability, housing production, and local land use policies. However, the new ABAG data indicate that demand for office

space will exceed the 1995 projection of 430,000 square feet by 20 to 30 percent, increasing demand through 1995 from 520,000 to 560,000 square feet. The university now estimates a need for approximately 116,000 square feet of office space for adminsitrative services in the west side area. This need further supports the 520,000 to 560,000 square feet projection.

In addition to regional employment growth, two major factors could limit office development potential in downtown Berkeley.

- Land aggregation difficulties limiting construction of larger office spaces

- Lack of parking facilities in downtown Berkeley

THE RETAIL MARKET. Downtown Berkeley has additional retail potential due to demographic, physical, and government policy factors. There is demand in the downtown for a junior department store, as well as for additional restaurant, entertainment, and specialty shops. Relevant factors contributing to this demand include:

- Pent-up demand in the downtown Berkeley area, especially significant due to the absence of competitive developments, given the abandonment of the retail portion of the Oakland City Center project and the limits on retail growth in the Elmwood and North Shattuck area.

- Sources of demand in the downtown include the local office population, nearby students, and high density and affluent residential areas in Berkeley and adjacent communities.

- Existing department stores, Hinks and Penney's, create draw but do not satisfy shopping needs.

- Presence of quality retail stores and restaurants create a location and destination.

- Recently a major downtown Ford dealership (Golden Bear Motors) gave up its lease and there are plans to convert the site to office and retail uses. A similar reuse of space occupied by auto dealerships may continue.

- Merchants in the downtown have expressed an interest in increasing their night time hours to capitalize on the business from entertainment activities in Berkeley.

- The vacancy rate for retail space is low, and rents for retail space are rising to levels found elsewhere in Berkeley. The present market for retail space in the downtown supports rents between $1.00 and $1.40 per square foot per month.

CONFERENCE HOTEL FACILITIES.

- Demand exists for a moderate size conference facility, geared to the support of university generated activities, with approximately 5,000 to 9,000 square feet of meeting rooms and 250 sleeping rooms.

- There could be demand for a larger facility in the future depending on the growth of research-related new office development.

HOUSING.

- The market demand for low-cost and subsidized housing is clear and strong in downtown Berkeley.

- The university has established a strong need for additional student housing.

- Although there will always be a demand for market-rate rental housing in Berkeley, including the downtown area, development of new rental housing is highly unlikely for two reasons: 1) financing, land, and construction costs would push rents higher than the potential rental market will pay; 2) developer fear of Berkeley's rent control.

- Limited multi-unit market rate condominium development appears feasible in the downtown even though such units would be affordable only for upper and upper-middle income buyers. Initial development should be on a limited scale.

TABLE 3

WEST SIDE STUDY UNIVERSITY PRIORITIES

(Prepared by University Department of Facilities Management, October 1982)

KEY:
A = Well Established Campus (or University) Priority and Need
B = Campus (or University) Need Identified and Established
C = Campus (or University) Priority Not Established

	HOUSING	PARKING	ADMINISTRATIVE	ACADEMIC & RESEARCH	RECREATION & OPEN SPACE
CALLAGHAN HALL				**C** Removal and replacement	
OXFORD TRACT - NORTH	**C** Possible student housing	**C** Possible parking associated with development		**A** Open space reserved for plant biology research **C** Possible reserve site for academic research bld.	
OXFORD TRACT - SOUTH		**C** Possible parking associated with development		**A** CNR biosciences use - possible infill development and future development	
LIFE SCIENCE BUILDING				**A** Renovation as part of biosciences program	
T-19					**A** Demolition (completed) and site landscape restoration
ORGANISMAL BIOLOGY BUILDING				**A** New structure for high technology teaching and research in animal sciences	
GENETICS AND PLANT BIOLOGY BUILDING				**A** New structure for high technology research and teaching in plant sciences	
WARREN HALL				**C** Addition for public health	
BIOCHEMISTRY				**A** No major programmed changes	

	HOUSING	PARKING	ADMINISTRATIVE	ACADEMIC & RESEARCH	RECREATION & OPEN SPACE
MORGAN HALL				A No major programmed changes	
MULFORD HALL				A Relocation of department of genetics as part of bio-science project C Additions (floor and wing)	
TOLMAN HALL				A No major programmed changes	
EDWARDS FIELDS		A Intramural Sports Facility (ISF) - See below			A Construction of tennis grandstand north end Edwards track A ISF - See below
INTRAMURAL SPORTS FACILITY (ISF)		A Construction of parking structure for 230 cars as part of ISF project (under construction)			A Construction of ISF on south end of Edwards field (under construction)
HEATING PLANT			A Alterations and addition for cogeneration facility		
2223 FULTON STREET			A Alterations for re-use of space possibly by administrative units C Possible addition	A Alterations for re-use of space possibly by research units C Possible addition	
WEST CRESCENT		C Possible underground parking	C Possible location for computing facilities	C Possible academic building site	A Continue open space use
CENTRAL GARAGE	C Removal & replacement for housing	C Possible parking location	C Re-use or removal and replacement for offices, including possible facilities support	C Possible academic and research location	
UNIVERISTY HALL AND PARKING WELL		A Continue systemwide parking	C Construct systemwide office addition in parking well area A Continue systemwide offices		
PARKING STRUCTURE "U"	C Addition of housing	C Possible addition of parking levels C Re-use of ground floor for Central Garage	C Possible addition of office space C Re-use of ground floor for printing plant		C Addition of recreation uses

	HOUSING	PARKING	ADMINISTRATIVE	ACADEMIC & RESEARCH	RECREATION & OPEN SPACE
PRINTING PLANT	C Possible housing location	B Facilities management staging C Possible parking location	B Relocation of printing plant and conversion to offices C Possible mixed use with retail and new development	C Possible academic and research location	
BANCROFT SITE BETWEEN ELLSWORTH AND FULTON	B Student Housing construction	A Continued use as parking B Possible parking structure with other development	C Administrative offices construction		C Construction of basketball stadium C Development for open field scheduled sports
2298 DURANT AVENUE			B Possible re-use by other UC units		
2120 BERKELEY WAY			A New location of UC Press		
BANWAY BUILDING (211 BANCROFT WAY) (LEASED)			A Re-use by UC systemwide after some units relocated to Berkeley Tower Building		
BERKELEY TOWER BUILDING (LEASED)			A Offices for some UC system-wide units		
STUDIO BUILDING (2039 SHATTUCK) (LEASED)			A Offices for UC system-wide		
2223 SHATTUCK (LEASED)			A Offices for UC extenstion media center		
2300 SHATTUCK AND 2036 BANCROFT (LEASED)			A Continued use by CEB		
COMPUTING FACILITIES			B Undefined general location		
MUSEUM, EXHIBIT SPACE			C Undefined general display area		
FACILITIES MANAGMENT STAGING AREA		B Undefined location			
BUSINESS ADMINISTRA-TION BUILDING				A Possible unidentified location	

	HOUSING	PARKING	ADMINISTRATIVE	ACADEMIC & RESEARCH	RECREATION & OPEN SPACE
LOW VISION CLINIC, SHCOOL OF OPTOMETRY				C Possible unidentified location	
ADMINISTRATIVE AND STUDENT SERVICES			C Possible unidentified location		
CONFERENCE FACILITY (PRIVATE SECTOR)			C Possible private sector project with unidentified location		
STUDENT HOUSING	A Possible unidentified location				
FACULTY HOUSING	C Possible unidentified location				
FOOD SERVICES			B Possible location in northwest precinct		
FLEET VEHICLE SERVICE AND STORAGE		B Possible unidentified location			
UNIVERSITY EXTENSION			C Possible unidentified location for office space		
SPORTS/CULTURAL PAVILLION					C Possible unidentified location
RESEARCH CENTER				C Possible unidentified location	

III. STUDY AREA RECOMMENDATIONS AND PROPOSALS

The overall goal of the West Side Study is to facilitate the use of university properties in a manner which benefits the university and supports community objectives. This goal can only be achieved through the clarification of both the university and the City of Berkeley's respective objectives for the West Side Study area. The city must make explicit its development and preservation policies for downtown Berkeley before the university can make decisions which are sensitive to community concerns. Alternately, the university must make explicit the intended use of its properties within the downtown and the adjoining campus so that the city can plan effectively for downtown.

In order to advance this goal, this study has included an investigation of the role of downtown Berkeley and contiguous campus lands and an exploration of the policies which could guide both university and city decisions. This analysis serves three purposes:

- to help facilitate a dialogue between the university and the city
- to assist the city in its current downtown planning effort
- to provide an initial framework within which the university can review plans for its properties in a broader, more community sensitive context.

The results of this portion of the study are presented in this chapter: first, as statements of university and community objectives which might guide future development decisions, and second, as more specific development and conservation recommendations which address downtown land use.

UNIVERSITY AND COMMUNITY OBJECTIVES

A number of major objectives have guided the preparation of the West Side Study. These objectives address the need to adequately accommodate university academic and administrative functions, to meet student housing needs, and to better utilize university land resources.

The university academic and facility planning efforts have established the following objectives which have a direct bearing on the future of the West Side Study area.

- Provide sufficient sites and building space to accommodate contemporary teaching, research, and administrative functions of the university.
- Assure that university development programs and activities are conducted in a manner which is sensitive to community objectives and minimizes adverse effects.
- Expand the supply of housing for students and faculty to help offset housing cost and condition problems created by the short supply of housing in Berkeley.
- Use university land resources as a means to provide financial assistance for university functions.
- Safeguard the visual and historic heritage of the Berkeley campus.

These university objectives are paralleled by community objectives expressed in the City of Berkeley's Master Plan adopted in 1977. Those Master Plan objectives which apply to the west side can be summarized as follows:

- Encourage development of the central district as a diverse center of city and regional-serving commerce, government, and cultural activities.

- Promote housing in downtown and contiguous areas, including the Oxford Tract, with special emphasis given to student housing.

- Oppose acquisition or leasing of additional property by the university unless the property remains on the tax rolls.

- Coordinate with the university to promote joint use of facilities, conservation and enhancement of campus open space, and limitation of student enrollment.

- Reduce dependency on automobiles and facilitate increased use of public transportation, bicycles, and walking as major means of transportation.

Using the above city and university objectives as a foundation, more detailed objectives were developed during the West Side Study and presented at a series of public meetings to solicit community responses. Community responses to the proposed objectives, which addressed the specific topics of land use, circulation, and urban design, are documented in Appendix C. Based on community response the following objectives are recommended as a basis for promoting development and uses which will accommodate both university and community aims.

LAND USE

- Maintain and reinforce Downtown Berkeley's historic retailing function as a citywide and regional comparison shopping and specialty retail area.

- Direct the rehousing of university academic, research, and administrative functions to the west side to take advantage of public transit access and to enhance the vitality of downtown.

- Maintain a diversity in retailing in downtown to meet the needs of students and Berkeley residents of all income levels.

- Encourage and accommodate the expansion of office and research related uses in downtown.

- Build upon the existing cultural facilities and resources of the community and university; thus, enhancing the role of downtown as a cultural focus for the community.

- Encourage commercial entertainment and food service functions to help enliven the downtown during both the day and night time.

- Promote housing opportunities in downtown to meet student, faculty, and market rate housing needs.

CIRCULATION

- Give priority to short-term parking over long-term parking to encourage transit use by employees and students and thereby, reduce traffic congestion and the preemption of downtown and campus lands by parking.

- Locate university, housing, and commercial uses in a pattern which will enhance the use of public transit.

- Design and develop transportation facilities to give priority to transit movement on major transit corridors in downtown.

- Improve pedestrian circulation within downtown, and between downtown and the campus.

URBAN DESIGN

- Protect major views of the San Francisco Bay and the Oakland-Berkeley Hills as seen from campus and the streets and plazas of downtown.

- Protect the significant historic, architectural, and biological resources of the campus and downtown and ensure a sensitive relationship of new development to these resources.

- Promote an environment throughout the west side which is scaled and appealing to pedestrians.

- Strengthen the functional and visual relationship between downtown and campus.

DEVELOPMENT ALTERNATIVES FOR DOWNTOWN

General consensus was reached on most of the above objectives during the community meetings. However, minority opinions were expressed which opposed more development in downtown, in particular office development and the expansion of student housing into downtown and nearby areas.

Simultaneous with the consideration of development policies for the west side, exploratory studies were made of alternative development patterns for downtown. The conclusions of these studies, along with the policy statements, form the basis for the more detailed program recommendations for downtown and the west end of campus which follow.

Briefly, five alternative growth patterns for downtown were investigated.[1]

[1] A detailed description and evaluation of these choices can be found in Sedway/Cooke memorandum of April 19, 1982 entitled Assessment of Initial Alternatives.

ALTERNATIVE A. This alternative would result in a compact downtown generally limited to the area bounded by Oxford, Durant, Milvia, and Hearst. Building heights would be limited to a maximum of five stories along the broader streets such as Shattuck Avenue and three stories along the narrow roadways. Square feet of building space on any parcel would be limited to a maximum of four times the parcel size for properties fronting Shattuck Avenue, Oxford Street, and University Avenue and to 2.4 times the parcel size elsewhere in downtown.

ALTERNATIVE B. This alternative would result in a compact downtown limited to the same area described in Alternative A. Similar height and floor area limitations would also be allowed. Heights up to nine stories and a building space to parcel area ratio of five would be permitted where development would neither obscure significant hill or bay views nor require demolition of significant historic buildings, and would contribute positively to the appearance of downtown and bordering streets.

ALTERNATIVE C. This alternative would result in a compact downtown limited to the area described for Alternative A and B with allowances made for construction of 12 story structures. A building space to parcel area ratio of seven would be permitted subject to the same conditions specified for Alternative B.

ALTERNATIVE D. This alternative would result in a linear downtown extending along Shattuck Avenue from Hearst Avenue to the Ashby BART. Development throughout the entire area would be limited to a maximum of three stories with a building space to parcel size ratio of four permitted along University and Shattuck and property adjoining the Ashby BART Station. Elsewhere the building space to parcel size ratio would be 2.5.

ALTERNATIVE E. This alternative would result in a linear downtown encompassing the same area as Alternative D and with similar conditions except heights up to

nine stories and a building space to parcel size ratio of five permitted subject to the conditions specified for Alternatives B and C.

Table 4 provides a comparison of the potential floor area supply to market demand for each of the alternatives. The measure of supply is based on underutilized land area developed to the proposed development conditions outlined for each alternative. The percent of supply absorbed is a ratio of supply to the anticipated market demand through 1995.

TABLE 4

COMPARISON OF FLOOR AREA SUPPLY TO MARKET DEMAND THROUGH 1995[1]

Alternative	Total Supply[2] (sq. ft.)	Percent of Supply Absorbed
A	2,466,500	25.8 to 27.4
B	5,347,400	11.9 to 12.6
C	7,894,900	8.1 to 8.6
D	7,601,900	8.4 to 8.9
E	11,908,800	5.3 to 5.7

1 Based on ABAG, Long Term Forecast for the Bay Area.

Note: This estimate shows a 20 to 30 percent increase over the ABAG 1979 employment projections indicating a demand for 520,000 to 560,000 square feet. In addition, the university now estimates a need for approximately 116,000 square feet of office space for administrative services in the West Side area.

2 Supply is based on a determination of land utilization and includes only parcels for which the value of the structure (or improvements) is less than the value of the land.

Based on responses received at community meetings Alternative B was selected as the choice which most closely matched expressed community opinions and the objectives presented to the community. **It should be noted that this choice imposes both height and building space limitations which are more restrictive than current city zoning regulations.**

DEVELOPMENT AND CONSERVATION RECOMMENDATIONS

The areawide land use, transportation, and urban design recommendations which follow expand upon and refine Alternative B. Community response to each of the recommendations printed in bold face type are recorded in Appendix C.

LAND USE RECOMMENDATIONS

Most of the common objectives developed during the course of the West Side Study address land use. Taken together they are permissive of development that retains the distinct retailing function of the downtown and minimizes displacement while encouraging new office development and housing.

The major principle guiding the land use recommendations provides for the coordination of university and city planning to promote better economic, social, and physical integration of the campus and downtown. The land use recommendations support the following benefits for the different community interests.

- For the Private Sector: Opportunities for a healthier retail and commercial office market.
- For the Neighborhood Communities: Protection of existing neighborhoods from adverse effects of increased development and provision of additional housing opportunities in the downtown area.

- For the City: Increase in the tax base avoiding the adverse effects of removing land or land improvements from the tax roles.

- For the University: Providing a growth opportunity for joint university/private research and commercial support without loss of critical open space resources on the main campus and without additional property acquisition by the university.

The recommended policy direction for the west side is indicated in Figure 5. Six basic land use zones have been drawn to protect the significant resources and opportunities in each.

- University Main Campus designated uses:

  Academic Zones
  Open Space and Recreation
  Athletics

- Downtown and Neighborhood designated uses:

  Retail/Commercial Core
  Complementary Commercial/Residential Zone
  Residential

In addition to the six basic land use zones, the recommendations include a series of alternative and more specific uses for key sites along the campus/city interface that are presently owned by the university, by the city, by the state, or privately held parcels in critical locations and aggregated to represent a significant development opportunity. These key sites are identified in Figure 5.

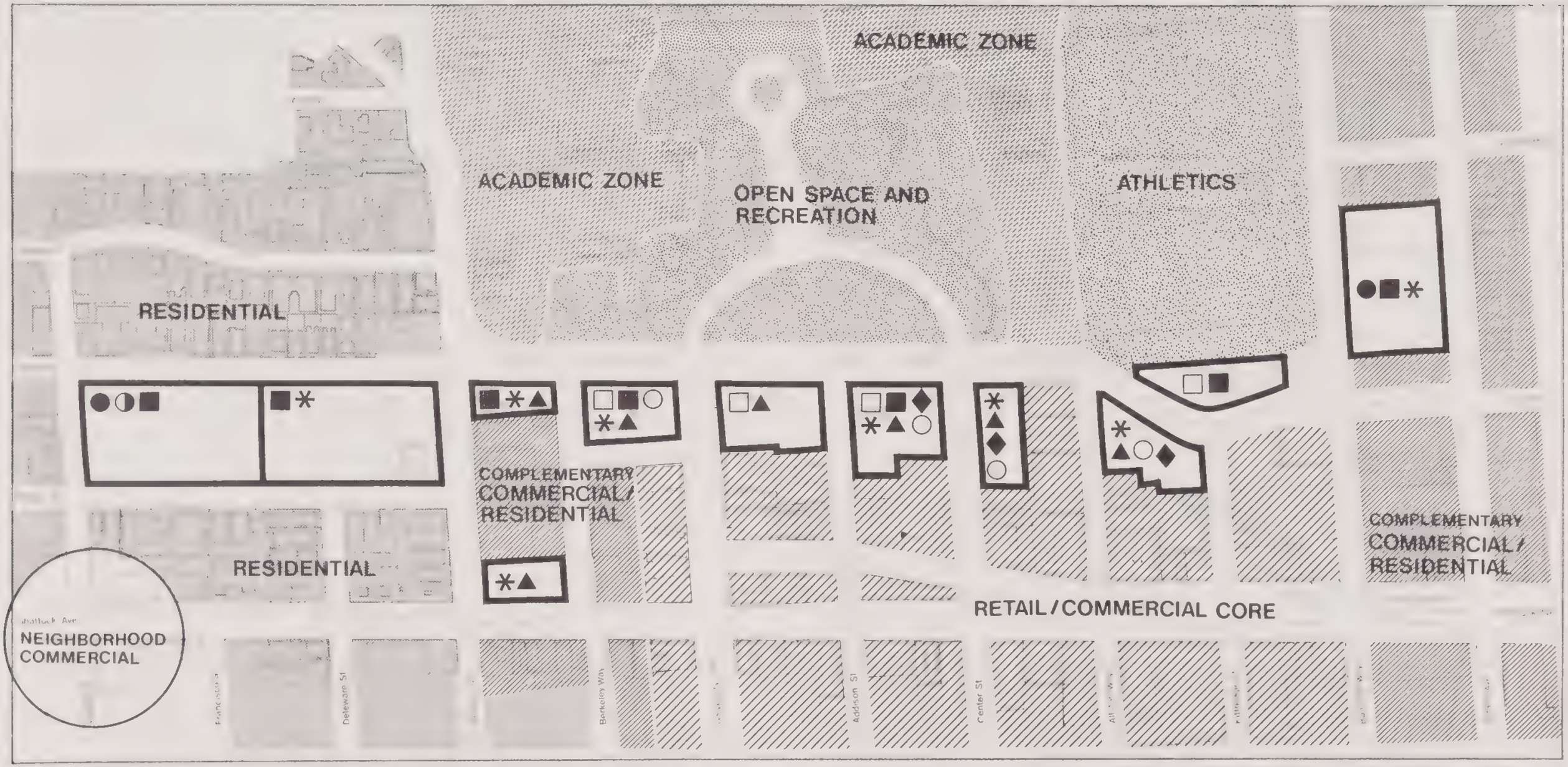
Detailed recommendations for each of the basic land use zones are provided below.

MAIN CAMPUS LAND USE. The campus is composed of a group of distinct districts. The diverse character of its open space and landscaped resources, and the unified coherence of major groupings of buildings provide focal points of activity and distinct character to these districts. The "Urban Design Studies for the Berkeley Campus", completed by a campus planning study group in 1979 identified these districts and recommended a "precinct organization" to help coordinate planning and design for the campus. The West Side Study's recommendations for that portion of the main campus incorporate this precinct concept, but also respond to the existing land use patterns and feasible changes in the adjacent downtown community.

1. **The main campus should continue to be reserved for academic or direct administrative support to academic functions. The open space resources are too important to both the campus and to the city and potential opportunities for the long-term additions to space needs too limited to be allocated to uses that can be accommodated off campus.**

2. **The Northwest precinct should accommodate additional academic structures. These structures should support an increasing concentration of activity within close walking distance of the key development opportunities off campus. Complementary nonacademic functions, such as private research space and student serving retail, should be located near off-campus sites. This would serve to strengthen the connection between the campus and downtown Berkeley.**

3. **Campanile Way should be formally extended to Oxford Street and future building sites reserved along its southern edge. In this way, the primary pedestrian route between downtown and the campus can be given the design emphasis suitable to a major entrance to campus and increase personal safety by**



Key Sites

Optional Uses

- University Administrative/ Support Function
- University Research
- Housing Opportunity
- Student Housing Opportunity
- Faculty Housing Opportunity
- Retail/Office Commercial Development
- Research Related Commercial Development
- Hotel/Conference Facility

FIGURE 5

LAND USE RECOMMENDATIONS

University of California, Berkeley
West Side Study

Sedway/Cooke
Urban and Environmental Planners and Designers

0 150 feet

providing activity centers adjacent to the pedestrian path.

4. The Crescent and West Gate to campus should be retained as permanent open space. This important visual and recreational resource provides a distinct image and definition of the campus edge, provides visual contrast with the academic precincts and urbanized edge of the downtown, and carries important meaning in the history of development of the campus. Any alterations to this zone should retain the continuous open space and respect the formal elements of the Beaux-Arts Plan.

5. The Grinnel Natural Area and Eucalyptus Grove should be retained and protected from intrusion by buildings and parking.

6. The athletic facilities at the southwest corner of the campus should be retained. The existing concentration of facilities, as well as the intramural facility presently under construction provide an important focus of activity and would complement nearby housing opportunities for students in the West Side Study area.

CITY LAND USE. The C-2 zoning district that blankets the downtown area permits a broad range of commercial and residential land uses. The present residential zoning retains a multiple family designation for the neighborhoods abutting the downtown. The recommended land use policies do not alter the present city land use designations, but propose that they be supplemented with additional measures to improve the retail functioning, commercial office opportunities, and residential quality of the downtown.

1. **Major city and regional serving retail should be limited to the core area. A retail/commercial core should be identified in which any proposed developments should be evaluated for their effect on the primarily pedestrian nature of a concentrated retail center (distinct from the neighborhood retail areas in Berkeley). The retail/ commercial core should recognize the large potential of existing underutilized retail frontage and the limited, though strong demand for future retail growth.**

2. In complementary commercial/residential zones bordering the core, provisions should be made to allow for commercial and residential uses which complement the function of the core. Mechanisms that encourage the integration of housing with commercial developments should be pursued.

3. The existing residential neighborhoods should be protected from the adverse effects of increased traffic, or adjacent incompatible uses or projects out of scale with the existing street-scale context.

4. **The neighborhood retail development along Shattuck Avenue should be separated from the downtown retail core with an intervening area of residential development. Encouraging residential infill in this intervening zone recognizes the major existing residential structures, including the recently completed three story residential complex at the corner of Shattuck Avenue and Delaware Street, and responds to the objectives of concentrating downtown retail frontage in a compact, pedestrian-oriented core.**

5. **Modify the existing controls on land use intensity by requiring a minimum building intensity for new structures and establishing criteria for permitting the conditionally approved higher limit.**

   - Establish a minimum FAR of 2.0 to encourage the concentration of development within the retail/ commercial core and to avoid disruptive

"holes" in the urbanized fabric of downtown resulting from under-utilization. Sites with historic buildings should be exempt from this provision and mechanisms provided to transfer development rights elsewhere in the downtown.

- Permit, by right, a maximum FAR of 4.0 throughout the downtown district consistent with refined land use and urban design criteria.

- Permit a FAR up to 6.0 only under special conditions and only in designated areas where the urban design recommendations establish opportunities for integrating greater bulk into the existing urban fabric. Special conditions may include, for example, on-site purchase of developments from a historic site elsewhere in downtown or incorporation of community-serving cultural facilities.

KEY SITE ALTERNATIVES. The above zones establish the overall land use pattern. Within this context a number of key sites are identified and more specific uses denoted (see Figure 5). Chapter IV describes and evaluates each of the publically held sites and their respective alternative uses in greater depth.

A number of specific land uses were analyzed during the West Side Study for their appropriateness, and financial feasibility. These specific uses include:

Market Rate Housing
Market Rate Student Housing
Market Rate Faculty Housing
University Administrative/Support Functions
University Research
Research-Related Commercial
Retail/Office Mixed-Use Commercial
Development
Hotel/Conference Facility

A number of key sites including the largest aggregrated parcels were assessed because they are 1) presently owned by the university or 2) owned by the city or state, or 3) large parcels of privately held lands at critical locations affecting the integration of planning in the campus/city interface. While each of the specific uses analyzed is more suitable in some locations than others, none of them are exclusively best suited to a single site. The possible financial arrangements and recommended roles for institutional players in the development of any of these specific uses is detailed in Chapter IV. The principle of permitting any specific uses deemed suitable serves as a guideline in recommending a specific use for any of the key sites. This does not mean, however, that a single specific use, permitted in many sites, will necessarily be developed at all of them. Instead, as the development process unfolds and specific arrangements are found to achieve individual projects, market forces and university needs will evolve to constrain future decisions on the remaining sites. Figure 5 identifies the key sites and recommended specific land uses.

CIRCULATION RECOMMENDATIONS

The first principle underlying the recommendations for circulation changes in the study area is that both the university and the city will benefit from a closer link between their respective functional activities and roles. This can be achieved by eliminating impediments to pedestrian circulation between the downtown retail/commercial core and the main campus.

The second principle underlying the recommendations for changes in circulation is that the downtown will benefit from improving the safety, efficiency, and amenities for the pedestrian within the retail/commercial core. These

benefits can be achieved by creating specialized roles for individual streets within the circulation network. Streets are designated for their primary purpose (though out of necessity other functions are not entirely excluded). PRIMARY ARTERIALS are designated to carry the burden of through traffic and regional access. LOCAL FEEDER streets are designated to direct automobile traffic to a series of parking reservoirs at the periphery of the retail/commercial core. Still other streets are designated as PEDESTRIAN PRIORITY to facilitate and encourage pedestrian movement and the vitality that comes from face-to-face contact. In addition, MID-BLOCK PEDESTIRAN PASSAGES are recommended as a means of: increasing the retail frontage at the ground floor with the retail/commercial core; providing offstreet courtyards similar to Trumpetvine Court to take advantage of the outdoor environment; and providing convenient paths to break down the large blocks into a more intricate, finely-scaled pedestrian environment compatible with the concentration of historic structures in the downtown.

Key attributes of each of the designated circulation functions are provided below and diagrammatically illustrated in Figure 6. Additional criteria are included in the Urban Design Concepts to further define the specialized roles.

Key attributes of Primary Arterials include the following.

- Functions as the principal carrier of through-traffic.
- Utilizes coordinated traffic signals to facilitate free moving through traffic.
- Serves as major route for entry to the key destinations in the study area.

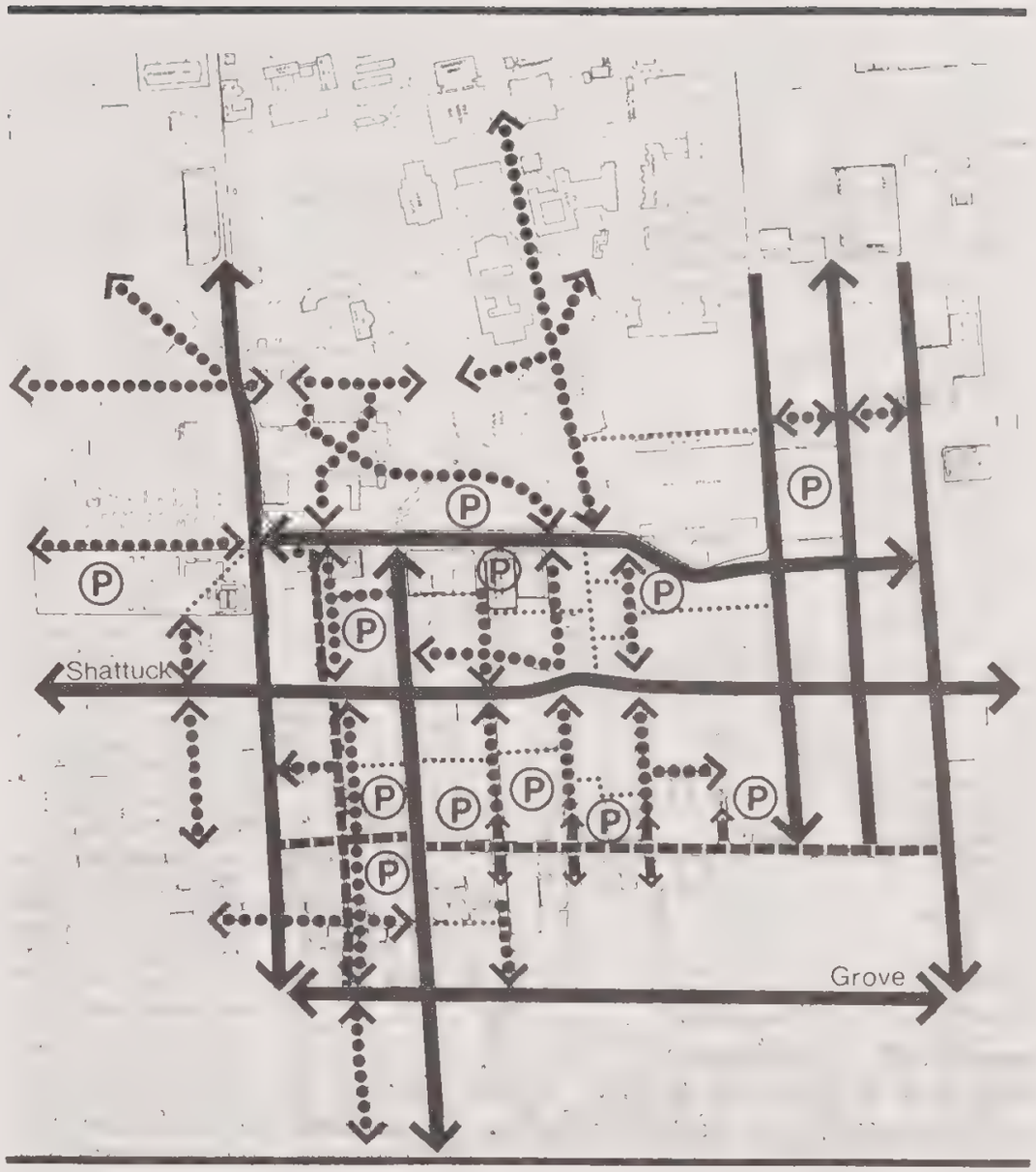


FIGURE 6
RECOMMENDED AREAWIDE CIRCULATION

- Prohibits curb-side parking, within critical capacity right-of-ways during peak a.m. and p.m. traffic hours.

- Provides for major pedestrian crossings at a limited number of intersections controlled by traffic signals.

Key attributes of Local Feeder Streets include the following.

- Functions as a primary conduit for directing automobile traffic to major peripheral parking reservoirs.

- Provides for pedestrian crossings at intersections or well-marked mid-block crossings.

Key attributes of Pedestrian Priority Streets include the following.

- Employs controls on vehicle traffic to make it more compatible with heavy pedestrian use of street.

- Minimizes auto access to off street parking.

- Provides for the removal of curbside parking where justified by intensity of pedestrian use.

Key attributes of Mid-Block Passages include the following.

- Limits traffic to pedestrians and delivery hand trucks in ground level passages through private development.

- Protects public access by agreement between city and owner for assuring right-of-way during commercial hours.

- Increases pedestrian mobility by penetrating the long east-west frontage of the downtown blocks.

Key attributes of Parking Reservoirs include the following.

- Provides for the concentration of public or private parking facilities in structure.

- Located at the periphery, so as not to fragment retail frontage.

- Coordinated with the street system to provide easy access to the reservoirs.

- Integrated with pedestrian street improvements to permit convenient access to retail and office uses.

Detailed policies and development guidelines are provided below.

SPECIFIC ROADWAY MODIFICATIONS. Figure 7 diagrams the recommended roadway modifications for the study area. The changes involve reconfiguring curbs, widening sidewalks, and eliminating some street parking in order to accommodate the specialized function of various streets in the existing network. These changes would increase the traffic capacity of Shattuck Avenue, make better provisions for bus service in downtown, and improve pedestrian circulation.

1. **Reconfigure the curbs and sidewalks along Shattuck Avenue between Center Street and Unviersity Avenue to permit two free moving lanes in each direction and a left-hand turn pocket at University Avenue. Eliminate the short-term street parking to avoid conflicts with through traffic. Permit deliveries only at designated off-peak hours.**

2. Reconfigure the curbs and sidewalks along Shattuck Square between Center Street and University Avenue to accommodate two way bus movement, bus pickup and discharge lanes, and expanded pedestrian activity. Permit northbound traffic from Shattuck to use Shattuck Square to make right-hand turns onto University Avenue. (Traffic analysis indicates this is a minor movement and would not interfere with bus movements on Shattuck Square.)

3. Close Addison Street between Shattuck Avenue and Shattuck Square to traffic to increase street capacity of Shattuck Avenue. Incorporate the right-of-way into a pedestrian plaza.

4. Widen sidewalks where indicated along Oxford Street to reduce crossing distance for pedestrians at intersections. (The street widening would retain the same number of lanes at the Oxford/Hearst intersection which is the critical point governing traffic capacity of Oxford Street. Projection of office and retail growth in the downtown for 1995 and assignment of the traffic generated by this growth indicates the modified Oxford Street could accommodate the increase in auto traffic.) Visually constrict the right-of-way and coordinate traffic signals to reduce the scale of the street and thereby encourage slower speeds:

   - Vary the cross-section of the street with widened sidewalks at the intersections.

   - Provide closely planted street trees in the parkways to establish a dense canopy of vegetation over the roadbed reducing the perceived scale of the street.

5. Establish a coordinated program for selective sidewalk widening along the pedestrian priority streets as indicated in Figure 7 to improve the street scale pedestrian amenities and discourage through automobile traffic.

   - Selectively eliminate curb side parking creating parking bays for deliveries, loading zones, and for a limited number of short-term convenience parking places.

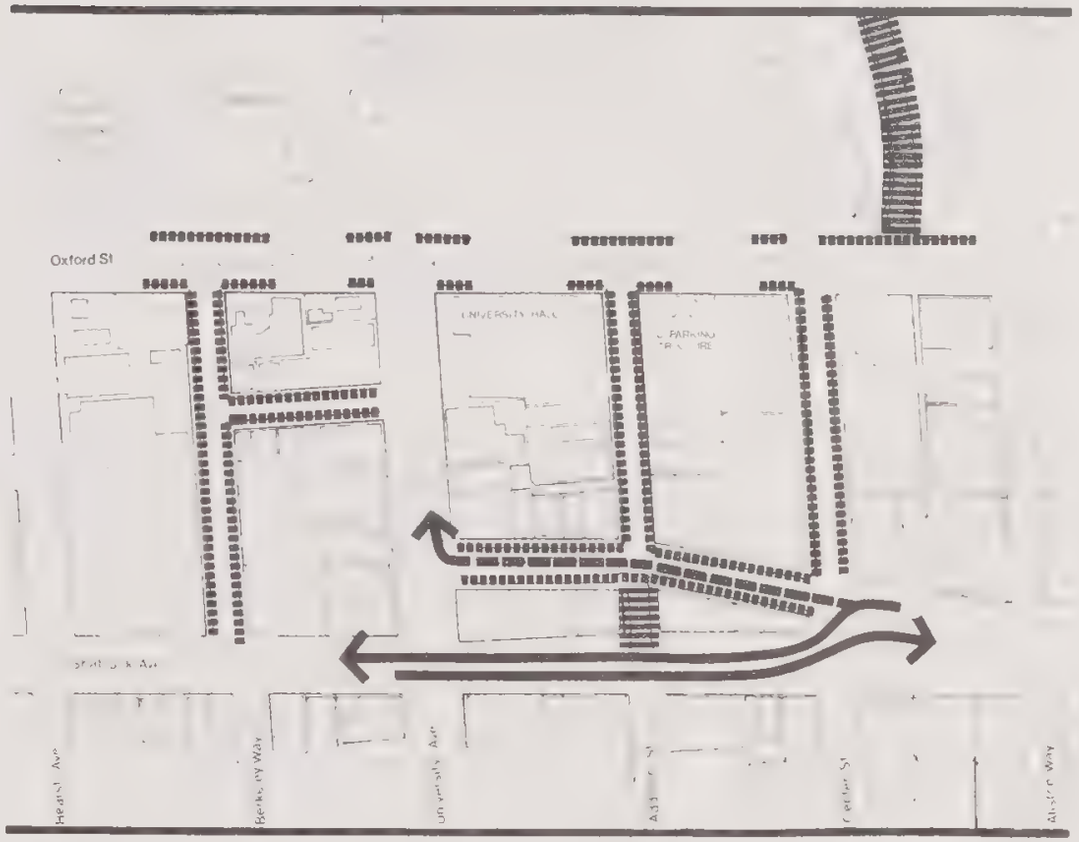


FIGURE 7
RECOMMENDED ROADWAY MODIFICATIONS

SPECIFIC TRANSIT ACCOMMODATIONS. Figure 8 diagrams the recommended changes to the study area to

accommodate increased convenience and more efficient functioning of the existing transit services. The changes involve modifications to the streetscape for selected segments in the study area as well as a new BART entrance facility.

1. **Establish a two-way transit mall along Shattuck Square and along Center Street between Shattuck and Oxford. Reroute the south-bound Shattuck Avene buses onto Shattuck Square.**

    - Widen sidewalks to provide increased off-loading space for bus patrons but retain a minimum of a forty-eight foot wide road-bed to permit sufficient space to permit express buses to pass local service buses waiting at curb-side.

2. **Encourage the integration of a new BART entrance facility within any new development at the north east corner of Shattuck and Center Street to provide for the convenient access of BART patrons to the eastern half of the downtown without crossing Shattuck.**

    - Explore the feasibility of development incentives as a means of underwriting the costs associated with the public improvement.

    - Ensure the location of new BART entrance ways do not crowd the public sidewalks and interfere with pedestrian movement at street level.

    - Provide the mechanisms for maintaining public access at all times to the BART entrance facility.

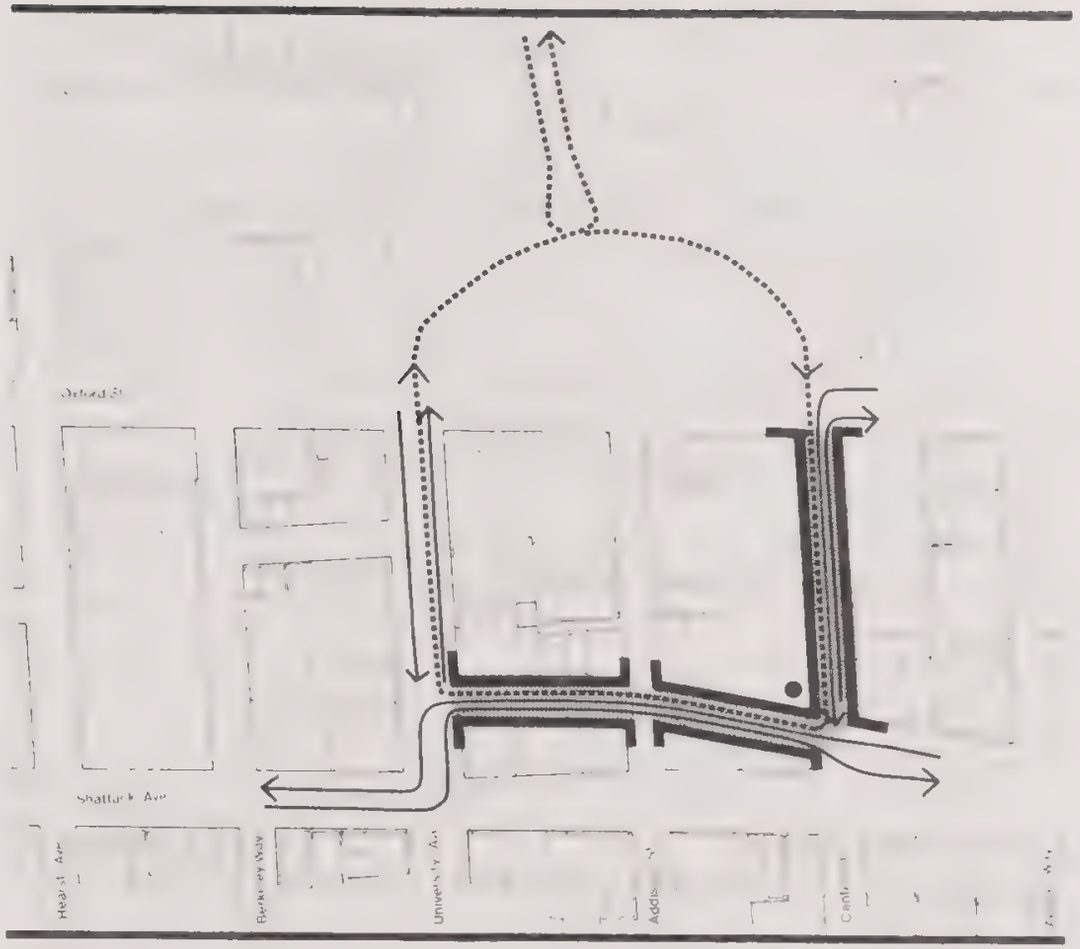


FIGURE 8
RECOMMENDED TRANSIT ACCOMMODATIONS

Two-Way Transit Mall
Primary Bus Route
Humphrey Gobart Route
New Bart Entrance (Integrated into new building lobby)

PEDESTRIAN NETWORK. Figure 9 diagrams the key pedestrian movements to be accommodated within the study area. The major origins of pedestrian traffic are the existing and proposed parking reservoirs and the major transit transfer points. The major destinations are the retail/commercial core and the major concentrations of academic functions on the main campus. The primary pedestrian circulation system represented in Figure 9

illustrates the need to provide improved pedestrian access between downtown and the campus and within downtown as well.

The primary pedestrian routes are separated into two major classes illustrated in the recommended areawide circulation diagram shown in Figure 6. The Pedestrian Priority Street and Mid-Block Pedestrian Passage are defined earlier. The relationships between them and objectives for improving pedestrian circulation are delineated in the following policy recommendations and design guidelines.

Pedestrian Access To Campus.

1. **The diffused organization of pedestrian movement across Oxford Street should be concentrated at four locations (Berkeley Way, University Avenue, Center Street, and Bancroft Way) to avoid unnecessary conflicts with automobiles and clarify the movement between academic zones and regional transit services.**

   - The present entrance at Hearst Avenue and Oxford Street should be closed by infilling the corner with new structures to create a barrier to direct access. Foot traffic should be redirected to a new entrance at Berkeley Way. This will avoid the major safety conflicts at Hearst and increase vehicular capacity at the critical point of turning movements from Oxford to east bound Hearst.

   - The present point of entrance at Center Street should be physically improved to establish a primary pedestrian entrance. This path provides the most direct link between campus and BART.

2. **The existing barrier to pedestrian access to campus at the southwest corner should be broken to facilitate pedestrian movement between campus and the residential community to the southwest.**

   - The back side of the eastern bleachers to the track stadium provides an opportunity to create a pedestrian link to campus.

3. **At the time of any major modifications to the southern half of the Oxford Tract, a pedestrian path should be incorporated into the site planning to provide a direct connection to Delaware Street. Delaware Street provides the most direct route via a pedestrian priority street to the residential community west of Shattuck and north of University Avenue.**

Pedestrian Movement in the Retail/Commercial Core.

1. **The system of mid-block pedestrian passages initiated by Trumpetvine Court and University Walk should be expanded to an integrated network of north-south passageways.**

   - Provision of mid-block passages should be a requirement of new development in the zone between Shattuck Avenue of Oxford Street, from Berkeley Way to Bancroft.

   - Mid-block passages should be provided at grade level but may be directly beneath structures, though interior courtyards, under glass covered arcades, or open to the sky.

   - Portals to the mid-block passages should be clearly delineated to clarify circulation patterns downtown and opposing portals across streets should be offset no more than 100 feet to maintain convenient, continuous circulation.

- Maintenance of mid-block passages should be provided by individual property owners, though standards for safety, lighting requirements, provision of seating, and general upkeep may be established by the city.

- Public access through the mid-block passages should be guaranteed by agreement between property owner and the city.

- Frontages along the mid-block passages should be utilized for retail and other pedestrian-oriented uses.

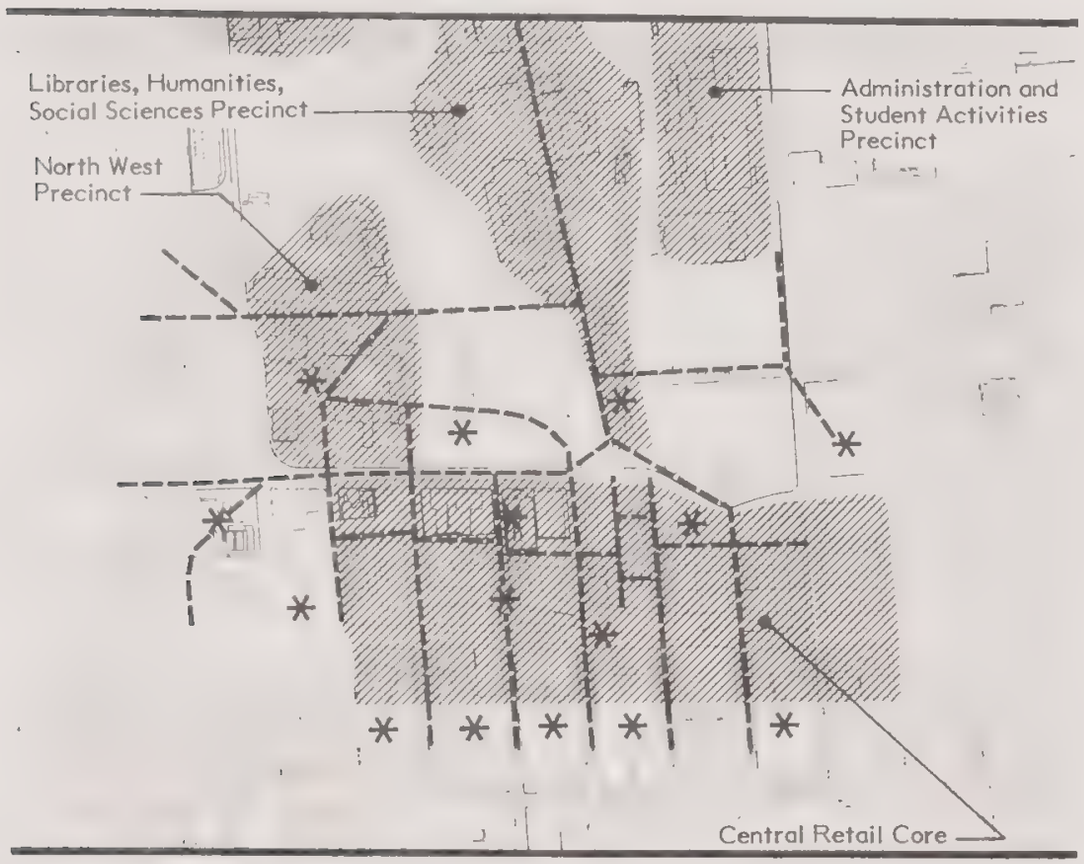


FIGURE 9
RECOMMENDED PEDESTRIAN NETWORK

OVERALL PARKING CONCEPTS. Parking recommendations for the West Side Study area have been developed for campus and city properties.

Campus Parking Concepts. The present parking pattern on campus provides a number of land use and visual impacts affecting the quality of the physical environment. The scattered surface parking areas throughout the open space areas, particularly at the formal entrance at the Crescent, demean the visual quality of the landscape resources. The larger surface parking lots, particularly in the center of the northwest precinct, highlight the under-utilization of the critical land resources. Still the demand for convenient, on-campus parking places will remain high and exporting all campus parking to off-campus sites would create additional impacts on the adjacent residential neighborhoods.

The recommended urban design guidelines for the campus contained in the 1979 Campus Planning Study Group, "Urban Design Studies for the Berkeley Campus," provide that, "Automobiles, except for those belonging to disabled persons should be excluded from the central campus. Parking lots should be accessible only from perimeter streets." These guidelines provide for peripheral lots located on the main campus but adjacent to public streets. The 1981 recommendations of the Campus Landscape, Open Space, Circulation, and Parking Task Force recommended even more specific parking guidelines. ". . . assuming no increase in on-campus parking, small, scattered, surface lots and street parking should be removed and replaced by lots beneath buildings or plazas."

Since the enrollment policies for the campus are intended to stabilize the campus population, no increase in parking is justified except to reduce impacts on residential neighborhoods from street parking by commuters to the campus.

The recommended concept for parking in the west side area of the campus is to identify locations where parking can be integrated beneath buildings and plazas and to provide for a transition from the existing scattered surface lots to these new parking reservoirs. (See Figure 10.)

Specific campus parking recommendations include:

1. **Maintain the existing number of parking places on the main campus.**

2. **Phase-out the existing surface parking in the west side and provide replacement in new structure parking at designated locations.**

3. **Limit the provision of additional commuter parking to encourage alternative means of transportation.**

4. **Retain existing standards for student residence parking providing mechanisms can be provided to make parking financially feasible.**

5. **Provide for the public use of campus parking structures on weekends and during the evening hours.**

City Parking Concepts. In order to encourage transit utilization, reduce conflicts between on-street parking and traffic flow, improve local air quality, and preserve sufficient short-term parking for shoppers, the Berkeley TRiP project has issued a final report with a number of parking recommendations. Most of the policies relate to incentives for encouraging alternatives to automobile travel. This major effort examining the management of existing parking resources is a significant step in developing a comprehensive parking policy.

Two major realities still face the parking situation in the downtown. First, the existing pattern of private surface parking lots contributes to significant barriers to the commercial vitality of the downtown. Second, demand for parking places in the downtown can be expected to increase, even with the implementation of the incentives recommended by the TRiP project, due to the projected expansion of retail and commercial uses.

The recommended concept for parking in the retail/commercial core of the downtown is to identify locations where parking can be peripherally located in parking reservoirs, and provide the incentives and controls to make a transition from the existing pattern of scattered surface lots to these reservoirs. (See Figure 10.)

Specific city parking recommendations include:

1. **Prohibit parking as a use in the C-2 zone except where specifically designated in an overall parking concept plan.**

2. **Encourage the removal of existing fragmented surface parking lots from the downtown.**

3. **In the absence of a parking requirement for downtown land uses, utilize the exisiting parking assessment district to distribute the costs of parking among the potential beneficiaries.**

4. **At locations where parking reservoirs are deemed appropriate, provide development incentives to integrate public parking accommodations into private projects.**

5. **Sufficient short-term parking spaces should be retained at the designated parking reservoirs to replace the short-term parking lost on the streets by modifications to the circulation pattern, and to provide for the increase in retail space in the downtown.**

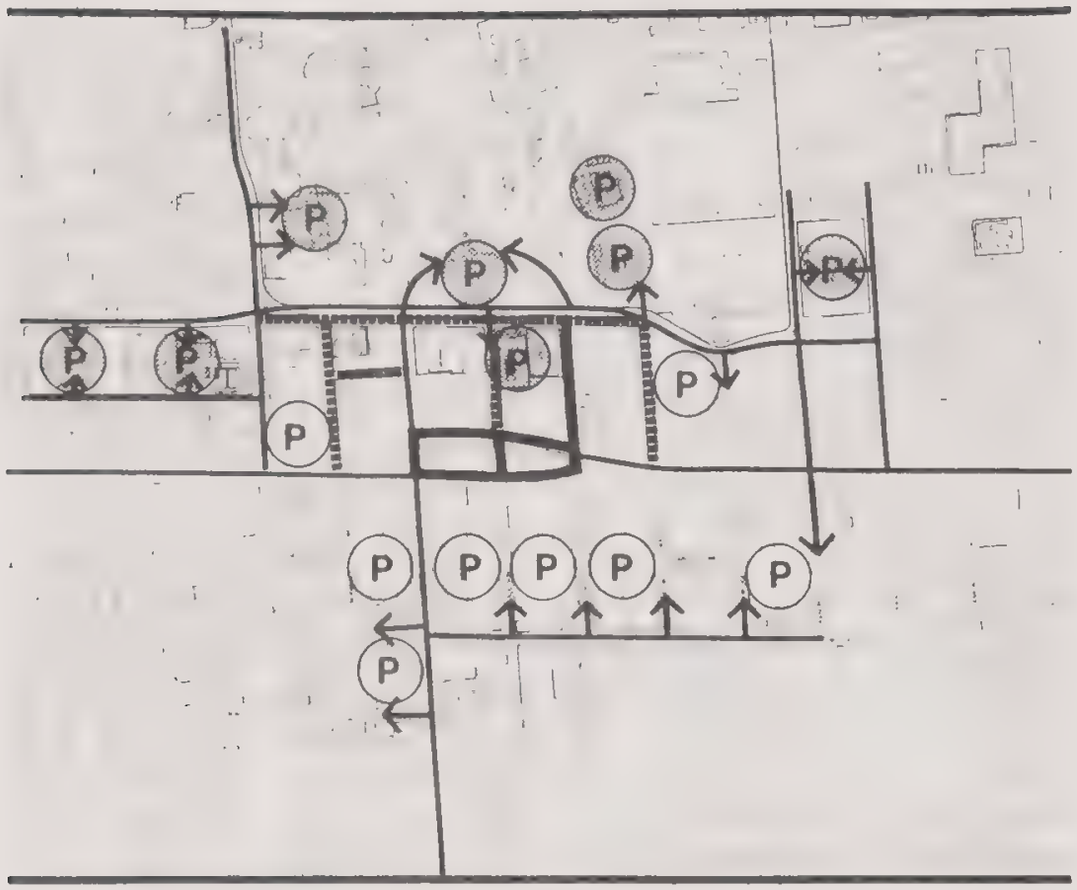


FIGURE 10
RECOMMENDED PARKING CONCEPTS

P Long Term Parking Reservoir

University Facility

City and/or Private Facility

→ Major Auto Access

Restricted Street Parking

Prohibited Street Parking (Deliveries only)

Specific Parking Programs and Design Guidelines. Figure 11 diagrams the recommended parking program for the study area. The following specific guidelines should pertain to the identified sites.

SITE A: Two levels of parking can be integrated into the future academic development at this site: one level below grade and a second at grade. If parking is also provided beneath the designated central plaza, a minimum of approximately 200 spaces could easily be provided at this location. The draft EIR on the "Biological Sciences Construction and Alterations Project" indicates that as many as 600 spaces could be incorporated in a three-level structure encompassing the entire open area from Fulford Hall to Hearst Avenue. However, this configuration poses many conflicts with pedestrian movement between Hearst Avenue and the center of the building assemblage, as well as pedestrian movement from this precinct to Oxford Street.

- Entrance to the parking structure should be from Hearst Avenue to avoid conflicts with primary pedestrian movement to Oxford Street.

- Ground level assignable space should be integrated into any face of the parking structure fronting on the central plaza.

- Ground level pedestrian routes at the east and west perimeters of the parking structure should provide direct access from Hearst Avenue to the central plaza.

SITE B: While this site is presently criscrossed with a number of underground utility lines and represents a major open space resource for the campus, a parking structure may be integrated into the site. More detailed engineering cost estimates should be undertaken to assess the feasibility. A stepped parking structure profile, two or three stories at the eastern edge stepping down to only one story at the western edge could provide approximately 250 parking places.

- Entrance to the parking structure should be from approach ramps adjacent to the existing Crescent Drive.

- This site may provide replacement parking opportunities centrally located for assigned spaces in the existing U.C. parking structure, if that structure is

allocated to support alternative university objectives.

- This site provides a key opportunity for visitor parking convenient to the major entrance to the campus.

- This site provides a unique opportunity to serve a dual role of supporting campus and downtown needs, and it's central location makes it a preferred option for meeting the needs of short-term visitors to campus.

SITE C: Two levels of parking can be integrated onto the future academic development sites providing between 200 and 300 spaces. The sloping site would permit easy access from Oxford Street directly into the lower level.

- Existing below grade fuel storage facilities may have to be relocated in order to facilitate the building program at this site.

- Care should be taken to protect against adverse hydrostatic pressure from the adjacent high water table.

SITE D: This site represents an optional visitor parking site if the the structure below the Crescent at Site B is found to be prohibitively costly. Two levels of parking could accommodate approximately 150 spaces by partially depressing the structure into the site and retaining the top deck as pedestrian plaza.

- Siting and design of a parking structure at this location should preserve the direct north-south pedestrian path between central glade and the Harmon Gymnasium area.

- The parking structure should not impose on the central glade, the Eucalyptus Grove, and Strawberry Creek.

SITE E: The Oxford Tract represents a key opportunity for providing additional parking spaces. Two levels of parking integrated into the sloping site could provide up to 400 spaces on the northern half and an additional 400 spaces on the southern half.

- Parking structures at the Oxford site should be provided only as part of a larger building program that integrates the structure with academic, commercial, or residential uses.

- Access to structures should be limited to Oxford Street and Walnut Street.

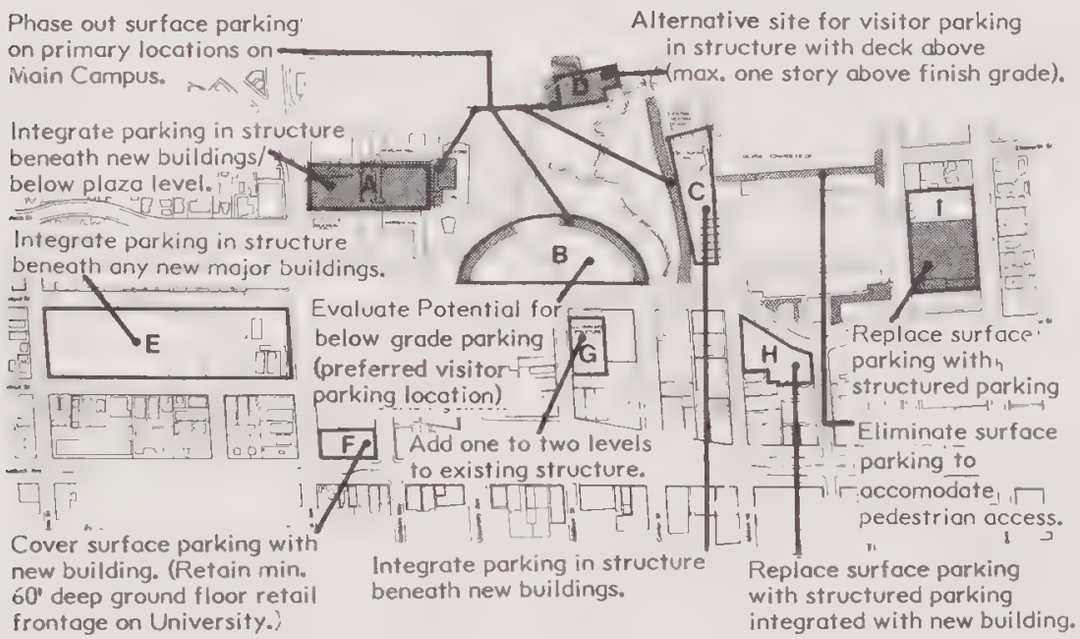


FIGURE 11

RECOMMENDED PARKING PROGRAM

Remove Surface Parking

New Parking Facilities

SITE F: The Shattuck Avenue frontage of the State Public Health Building is presently utilized for surface parking. While other land use and urban design provisions provide for commercial or housing opportunities at this site with greater land utilization, it also presents a viable opportunity for four levels of parking providing a net increase of approximately 240 spaces.

- The parking design should retain a minimum of sixty-foot deep ground floor retail frontage on University Avenue.

- Access to parking should be from Hearst Avenue or Berkeley Way.

SITE G: The U.C. parking structure is three levels and presently has a capacity of 252 spaces.

- The basement level has a high ceiling level, designed in anticipation of alternative uses. This ground level presents an ideal relocation opportuntity for the service garage function presently located at the U.C. Garage at Oxford and Berkeley.

- The existing structure was originally designed to take two additional parking floors. However, building codes have changed and an engineering assessment is required to determine if two additional floors can be safely added.

- If a hotel/conference facility is developed at the printing plant site parking spaces at this location would have to be allocated to support this change in use. In this event, a parking structure at the Crescent Drive, Site B, may be necessary to serve the present need for University Hall.

SITE H: The surface parking lot owned by the city at Allston Way and Oxford Street has a present capacity of 132 spaces.

- More intensive development at this site should provide for a minimum of an equivalent amount of public parking to replace the existing.

- If a hotel/conference facility is developed at this site or at the alternative site privately held at the corner of Center Street and Oxford Street, then an additional number of spaces should be provided at this site to assure sufficient parking requirements for this change in use.

SITE I: Two to three levels of parking can be integrated into this sloping site providing approximately 350 to 525 spaces. It presently provides 206 surface parking spaces.

- Utilizing the Bancroft lot as a student housing site would require the provision of 115 parking places reserved for the residents at the current standards in the existing University Housing Policies. Providing these spaces without replacing the existing surface parking spaces would require a minimum of 50 parking places with a deck structure over and the remaining in surface parking.

- The parking design should retain a sixty-foot deep ground floor retail frontage along the entire length of Bancroft Way.

URBAN DESIGN RECOMMENDATIONS

Figure 12 diagrams the recommended long range design objectives for the study area. The recommendations fall generally into four categories: Open Space Definition, Building Heights and Setbacks, Pedestrian/Retail Relationships, and Historic Resource Protection. For each of these categories, specific policy recommendations and development guidelines are provided.

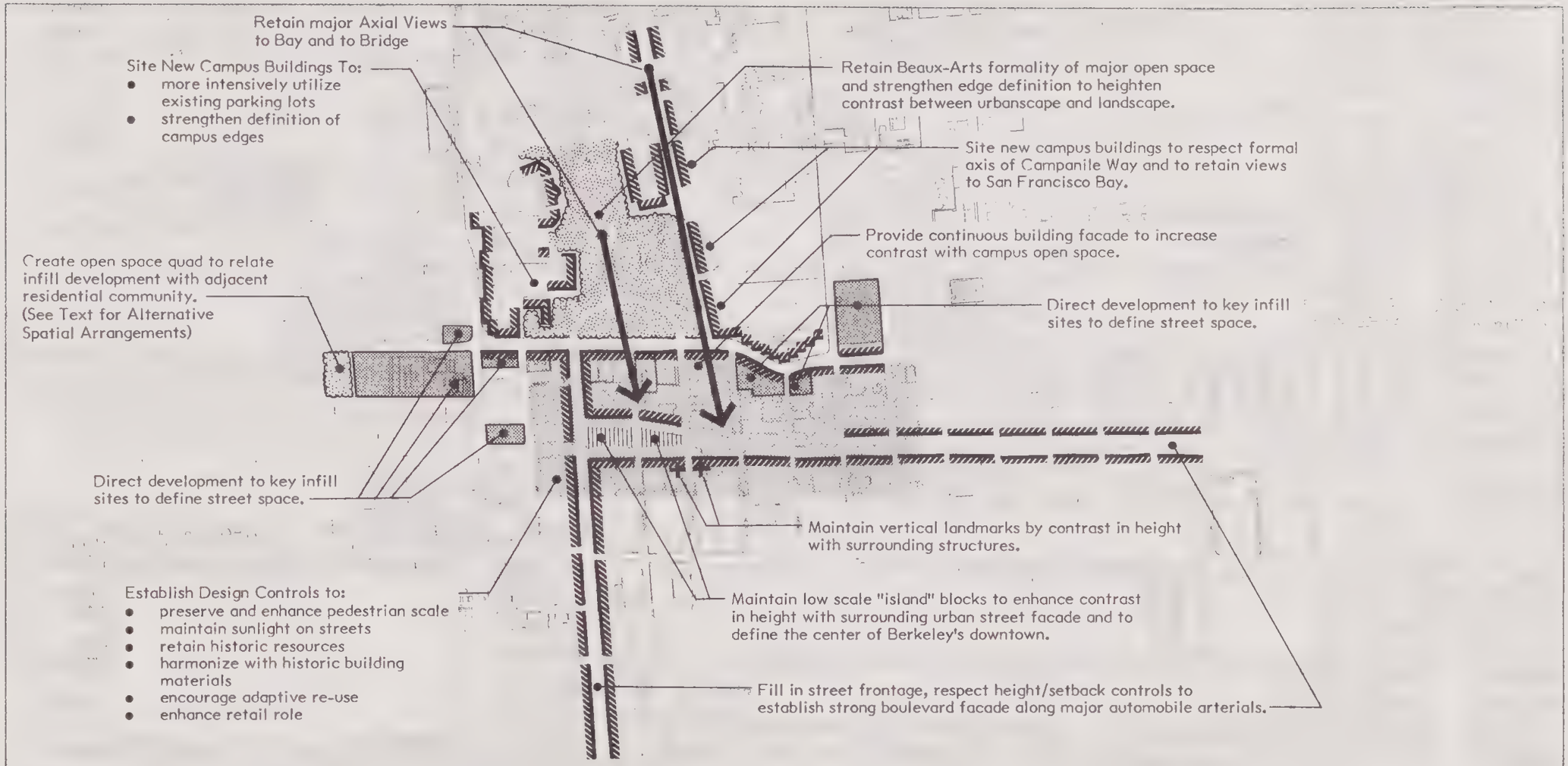


FIGURE 12

RECOMMENDED LONG RANGE DESIGN OBJECTIVES

University of California, Berkeley West Side Study

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OPEN SPACE DEFINITION. The recommended open space policy, shown in Figure 13, provides development guidelines for controlling the building facades, the character of major landscape areas, and the location of major and minor entrances to the campus. The intent of these guidelines is to give consistent form to the public street spaces and landscape areas in the study area.

1. Building Facades. **Provide well-defined and attractive street spaces by establishing a unified relationship between the heights of buildings and the width of streets. Recommended conditions for achieving this aim are the following:**

   - The height of building facades should avoid abrupt contrasts in heights.

   - On the narrow east-west streets building street-frontage heights should be limited to two and three stories to maintain a human scale.

   - The height of building facades along Shattuck Avenue, Oxford Street, and University Avenue should be four to five stories to provide a sufficient sense of enclosure of the street space.

   - Building setbacks should be avoided along street frontages with the exception of bays or other small scale intrusions which lend scale and visual interest to the facades.

   - The street level portion of the building facade should be distinguished from upper floors and visual interest for pedestrians maintained by extensive use of display type windows.

   - Use materials, door and window details, and variations in the building facade to help provide a sense of scale. For parcels with street front widths greater than 30 feet, design the facade to maintain the existing small scale store front appearance.

2. Landscape Areas and Edges. **Provide for the more distinct definition of landscape areas to reinforce the character of different open space resources and heighten the contrast between identifiable landscape communities.**

   - The formality or informality of a landscape is one measure of its distinct character. Changes to the landscape should increase the contrast between the Grinnel Natural Area/Eucalyptus groves with the more formal Crescent Drive.

   - Landscape edges can be used to define space and separate landscape areas. The edge of the Crescent Drive should be more formally landscaped and the width of the pavement reduced. A stronger definition of the edge of the space within the Crescent Drive should be established to balance a more strongly defined urban streetwall along Oxford Street.

3. Streetscapes. **Use landscape materials, such as street trees, paving, lighting, and street furniture to functionally support the different purposes of the circulation network and to visually reinforce this functional heirarchy. Among the conditions for accomplishing this distinction are the following.**

   - Formal street landscapes should use large scale street trees (such as Tulip trees, Liriodendron tulipifera) that are effectively used to line University Avenue. The trees should be regularly spaced. The foilage should be allowed to mature to complement the scale of the taller streetwall.

CONTINUOUS BUILDING FACADE

- Mid-rise 3-5 Stories
- Low-rise 2-3 Stories
- Formal Landscape Area
- Informal Open Space
- Strong Landscape Edge
- Informal Landscape Area
- Formal Street Landscape
- Major Pedestrian Entry
- Minor Pedestrian Entry
- Special Street Landscape

FIGURE 13

OPEN SPACE RECOMMENDATIONS

University of California, Berkeley West Side Study

Sedway/Cooke
Urban and Environmental Planners and Designers

0 50 150 feet

- Specialized street landscapes can use smaller scaled street trees planted regularly but with a rhythm that responds to the organization of the streetwall rather than the long vista associated with the boulevard.

4. Boundaries and Entries. **Establish an easily recognizable identity for downtown by visually distinguishing the area from contiguous areas and by visually highlighting vehicular and pedestrian entryways to downtown and the campus.**

   - Provide for changes in building heights at Shattuck Avenue and University Avenue, along Oxford Street and along Hearst, east of Oxford Street.

   - Maintain a sharp visual delineation between the campus and downtown by maintaining the open, landscaped appearance of the campus lands between Berkeley Way and Alliston Way. Reinforce this contrast by siting campus structures close to the Oxford frontage at Hearst Avenue and immediately north of Edwards Field.

   - Provide two well-defined pedestrian entrances to campus from downtown: at Berkeley Way and at the end of Campanile Way where it intersects with Oxford Street.

   - Provide a new pedestrian "quad" in the northwest precinct. The "quad" should serve as the precinct center and central open space for existing and expanded academic functions.

BUILDING HEIGHTS AND SETBACKS

The recommended building heights and setbacks for the study area are indicated on Figure 14. The recommendations are developed in response to the scale of the existing historic core, for the protection of significant views, and to permit intensification without eliminating sunlight or destroying the pedestrian scale of the narrow east-west streets in the downtown grid.

1. Residential Neighborhoods. **Establish a three story limit in the residential neighborhoods to maintain a consistent height with the existing housing resource.**

2. Retail/Commercial Core. **Establish a three story limit in specified areas within the retail/commercial core to achieve the following objectives:**

   - Encourage infill development that is in scale with the preponderance of low-scale historic structures.

   - Establish a building setback line above three stories for the pedestrian priority streets to maintain sunlight on the narrow streets and obscure taller buildings from sightlines along the sidewalk.

3. Major Arterials. **Establish a five story limit to reinforce the continuity of the major streetwalls along Shattuck Avenue and University Avenue compatible with the strongly defined segment between Durant Avenue and Allston Way on Shattuck Avenue.**

4. 100 Foot Maximum Height. **Maintain the maximum 100 foot height limit in the present zoning code but limit its application. Permit a higher structure, up to 140 feet, specifically for a hotel/conference facility to be located at one of the designated sites in the policy diagram. Structures greater than the 5 story maximum should conform to the following conditions:**

2 to 3 stories

3 to 5 stories

Existing Point Towers

Possible Point Tower Sites [max. 100']

Existing Slab Towers

Possible Slab Tower Sites [max. 140', for Hotel/Conference Center Use]

FIGURE 14

RECOMMENDED BUILDING HEIGHT & SETBACKS

University of California, Berkeley West Side Study

Sedway/Cooke
Urban and Environmental Planners and Designers

0 50 150 feet

- Taller structures should be generally located within the middle of the blocks or at key focal points adjacent to the primary arterial circulation routes.

- Generally taller structures should be configured as point towers rather than slabs to permit the greatest amount of sunlight to fall on the pedestrian priority routes.

- Taller structures configured as slabs may be sited where proposed building programs help to promote community wide objectives, e.g., retention of historic structures or the inclusion of housing in the downtown or hotel development. Locations where slab structures might be feasible are shown in Figure 14.

PEDESTRIAN/RETAIL RELATIONSHIPS

Figure 15 diagrams the recommendations for integrating the retail function of the downtown with the pedestrian movement patterns. There is an implicit heirarchy in the various pedestrian routes because of the need for streets to accommodate automobile traffic, transit vehicles, and delivery trucks as well as provide ground floor retail store fronts. There is also an implicit difference in the nature of retail frontages that are clustered to attract substantial pedestrian traffic or are diffused with other land uses to relate more to the automobile access of a typical strip commercial development.

The policy recommendations for integrating pedestrian/retail relationships follow:

1. Primary Retail Frontage. Establish a primary retail frontage designation to protect and enhance the retail function of downtown. To achieve this end, uses along the designated frontages should be limited primarily to those requiring pedestrian access and exposure and close physical proximity to other retail uses. Other commercial uses that do not have these requirements should be conditionally permitted. Among the conditions recommended include the following.

   - Use contributes to the consolidation and continuity in the downtown's retail pattern.

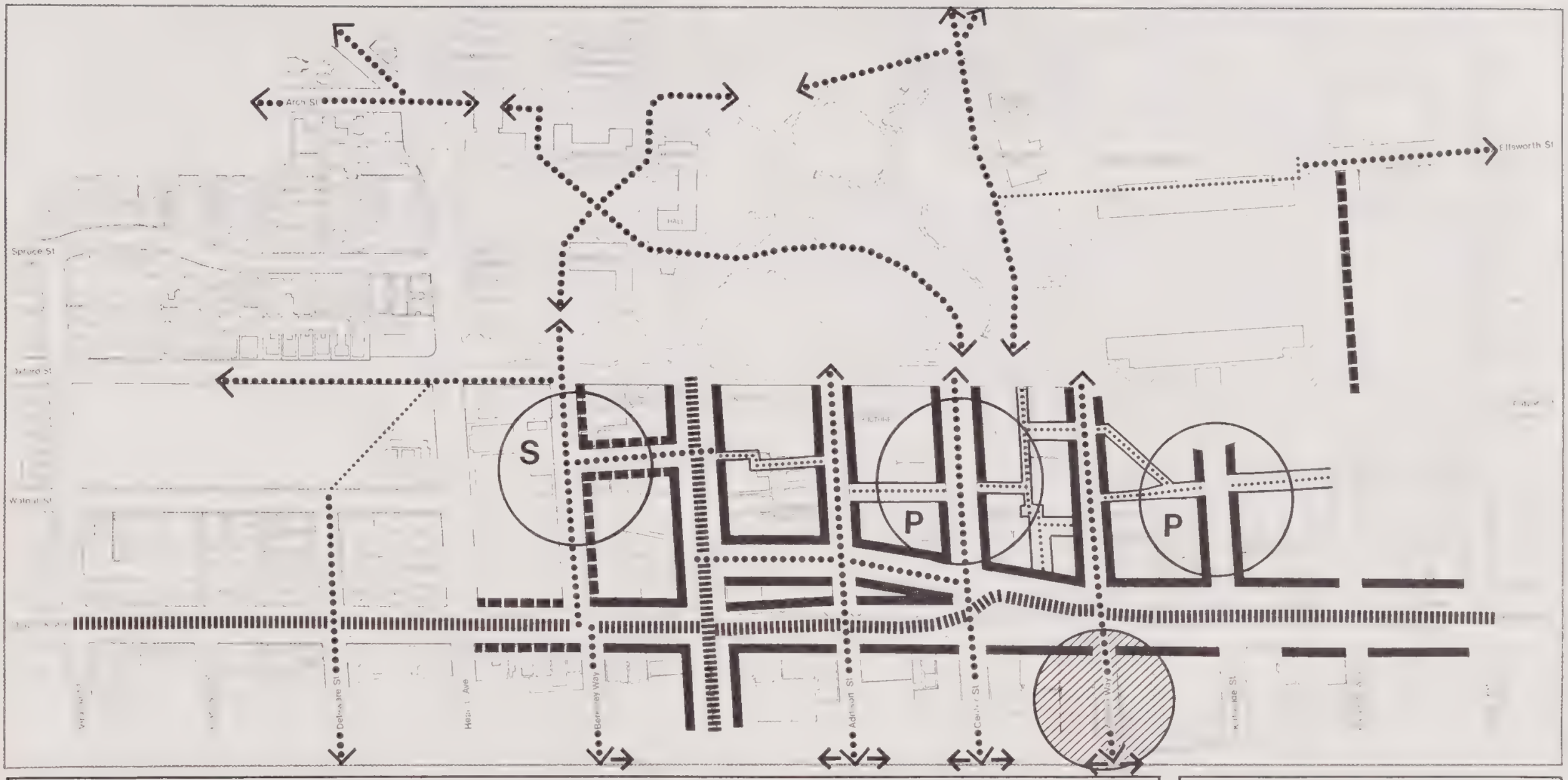
   - Use will produce major pedestrian traffic which will benefit neighboring retail uses.

   - Structure accommodating the use is designed to maintain visual interest for pedestrians along the designated frontage by maintaining an uninterrupted building frontage and display type of windows at ground level.

   - Access to on-site parking is prohibited from the designated frontage, and the servicing of the uses will not be incompatible with the pedestrian/retail function of the street.

2. Secondary Retail Frontage. Establish a secondary retail frontage designation to enhance the appearance and security of streets serving as major pedestrian routes. Use restrictions should be less limiting than those applied to the primary retail frontage. The major objective is the retention of visual interest for the pedestrian by providing display windows along the street, preventing gaps in the building frontage, and avoiding pedestrian conflicts with vehicular movements entering or exiting from properties along the street.

3. Dual Purpose Pedestrian/Vehicular Route. Recognize that Shattuck Avenue and University Avenue will function as primary retail frontages and serve as arterials for automobile traffic. Establish conditions for controlling the character and function of dual purpose streets including the following.



Dual Purpose Pedestrian/Vehicular Route

Pedestrian Priority Route

Mid-block Pedestrian Passage

Mid block Passage with Retail Frontage

To Parking

Primary Retail Frontage

Secondary Retail Frontage

Existing Retail Node

Potential Retail Node

P Primary

S Secondary

FIGURE 15

PEDESTRIAN/RETAIL RELATIONSHIPS

University of California, Berkeley
West Side Study

Sedway/Cooke
Urban and Environmental Planners and Designers

0 150 150 feet

- Maintain a sufficiently wide sidewalk to separate pedestrian traffic from the space devoted to the automobile.

- Utilize street trees to create a visually enclosed sidewalk space adjacent to the primary retail frontage that insulates the pedestrian from the traffic.

- Design signage for the dual function of relating to automobile and pedestrian traffic. Pedestrian oriented signs should be smaller, mounted within the first floor of the development and varied to maintain the interest of the pedestrian. Signs oriented to the motorist should be sited generally above the ground floor level and designed to be in scale with and sympathetic to the architectural fenestration of the building.

4. Pedestrian Priority Route. **Establish pedestrian priority routes that serve to create enclaves of retail activity where pedestrian traffic predominates. Recommended conditions provide for the following.**

- Maintain and promote pedestrian scaled street space by setting limits on contiguous building facades.

- Protect sunlight access by regulation of building heights.

- Design signage to relate to the communication needs of pedestrians rather than motorists.

- Provide a coordinated street tree planting program along the pedestrian priority routes that incorporates the widened sidewalks into small pedestrian gathering areas. Confine street tree planting to a single species to visually reinforce the functional distinction of streets.

- Incorporate benches and decorative lighting into the pedestrian improvements.

5. Mid-Block Pedestrian Passage. **Establish two classes of mid-block passages. Those peripheral to the retail/ commercial core or on the main campus should provide convenient pedestrian routes from adjacent residential neighborhoods to the campus. Those within the retail/commercial core should be integral to the retailing function of the downtown. Recommended conditions for those with a retail frontage provide for the following.**

- Maintain the continuity of the retail function along the mid-block pedestrian frontages. Promote the use of window displays, public entrances, and other pedestrian oriented improvements.

- Encourage the coordinated siting of outdoor eating areas with convenient food services to enliven the pedestrian atmosphere of the passages.

6. Retail Nodes. **Continue and reinforce the present concentration of major retail and encourage the addition of department store space in downtown. Establish the location to accept concentrated retail activities supporting, for example, larger comparative shopping facilities, or multi-level retail malls. The promotion of opportunities for incorporating larger concentrations of retail activity into the downtown have long been city policy, though integrated design and planning for such functions has been hindered by the market's inability to assemble sufficiently large parcels. The location of larger retail nodes entail siting strategies that are cognizant of the marketing requirements of such retail functions, their parking requirements, and their potential effect on the streetscape frontage.** Figure

15 identifies three possible opportunities for integrating an additional retail node into the downtown. Two of them are characterized as primary opportunities, the third is characterized as secondary because of its distance from the existing retail node represented by Hink's and Penny's. Recommended conditions for the siting of retail nodes provide for the following.

- Retail nodes shall maintain the continuous ground floor retail function on the primary retail frontage streets. Convenient pedestrian entrances as well as window displays shall be provided at ground level.

- Service entrances and loading docks shall be sited so as to minimally disrupt the pedestrian function of pedestrian priority routes.

- Large, blank, windowless walls shall not be permitted.

- Retail nodes shall incorporate any mid-block pedestrian passage necessary to maintain the continuity of the system.

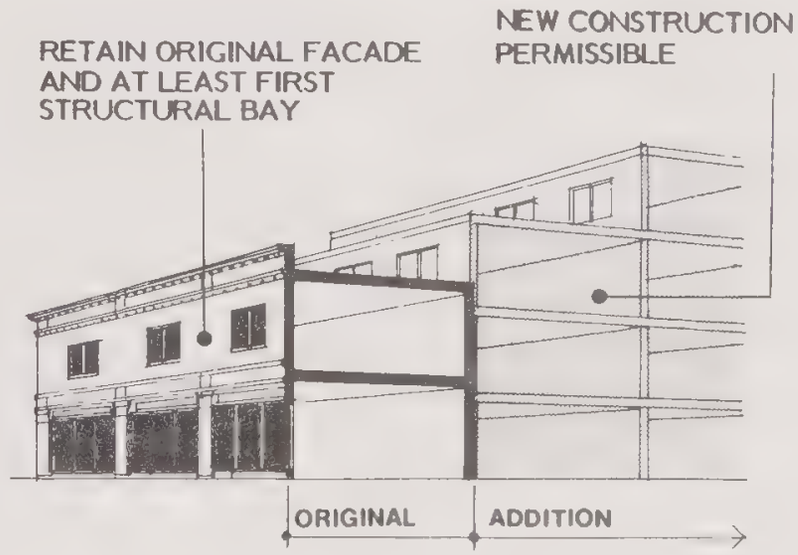
PROTECTION OF HISTORIC AND ARCHITECTURAL RESOURCES

Figure 1 documents buildings designated by the Berkeley Architectural Association (BAHA) as having special historic and architectural value. The visual contributions of these structures are important resources which should be recognized and taken advantage of in the university, city, and private sector's planning and development activities. Suggestions for protecting and enhancing these resources are described below.

1. Undertake a more detailed evaluation of the structures identified by BAHA and divide into three classes: (1) structures with historic or architectural significance; (2) structures whose architectural or historic significance results primarily from street front facade features; and (3) structures with minor historic or architectural importance which help provide a complementary context for the more significant structures because of heights, materials used, or other architectural features.

2. Class 1 buildings should be protected from demolition by ordinance and transfer of unused development rights permitted to compensate the property owners for loss in economic value. (For example, a Class 1 building with 20,000 square feet of space would be permitted to sell development rights for 20,000 square feet to property owners elsewhere in the downtown where higher floor areas and heights are permitted.)

3. Encourage retention of Class 2 structures by permitting new and expanded construction behind the street facade and the first or second structural bay. (See accompanying figure.)



GUIDELINES FOR CLASS 2 STRUCTURES

4. Encourage remodeling and maintenance of Class 3 structures to improve the compatibility of these structures with Class 1 and 2 until such time that demolition and reconstruction is economically feasible.

5. Set up a program for relocating structures whose scale, size, and limitations on commercial reuse make them unsuitable for retention within downtown.

6. Additions to historically or architecturally significant structures should be of contemporary design with the size, scale, color, materials, and proportions of windows, doors, floor heights, and exposed structural elements designed to establish a compatible and complementary appearance.

7. Remodeling of older structures should recognize the original design and remove conflicting signs and partial facade applications which fragment and destroy the unity of the structure.

8. Indepth investigation should be made of potential tax write-offs, accelerated depreciation programs, and design advantages of preservation programs, including establishment of a National Register Historic District, use of a local historic preservation ordinance, or historic designation of only individual structures. The former two alternatives extend opportunities for tax and depreciation advantages to all properties within the designated district but also impose more stringent conditions on replacement and new construction.

IV. OPPORTUNITIES AND ROLES

On- and off-campus land holdings of the university in the West Side Study area provide a number of development opportunities that could promote both university and community objectives. These opportunities include the potential to accommodate the university's academic and laboratory space needs and reinforce the role of downtown Berkeley by redistributing a portion of campus activity to the downtown's eastern edge. This redistribution of campus activity could have transportation benefits as well since the west side is more accessible by public transit than other parts of the campus.

Other opportunities include the potential for use of university-owned lands for private purposes, thereby producing a steady source of revenue to support campus capital improvements and services. This action would, in turn, provide the City of Berkeley and other taxing districts with property tax revenues from university lands and help promote land uses which contribute to the economic vitality and appearance of downtown. Similar opportunities exist for other publicly-owned land in downtown and for cooperative agreements or coordinated actions with private property owners of adjoining sites.

Key development opportunity sites include properties of the University of California, the State of California, the City of Berkeley, and a limited number of private properties. A following section identifies alternative development prospects for sites found to be feasible and discusses the advantages and disadvantages associated with the respective choices.

POTENTIAL UNIVERSITY ROLES

Each of the alternatives raises questions as to the type of participation in the development or conservation effort by the university, state, or city. Five development situations have been identified in the west side:

1. On-campus development of academic, research, administrative, and other campus support facilities.

2. Off-campus construction of student or faculty housing.

3. Off-campus construction of non-academic facilities to serve either campus or systemwide university needs.

4. Joint university and private use of a structure on a property now owned by the university.

5. Exclusive private use of a structure on land now owned by the university.

Several key issues must be addressed. First, should the land be sold or leased? Second, should the public body act as a developer, a joint venture partner or solely as a land lessor? Third, which sites in the study area have the greatest development potential?

SALE VERSUS LEASE

Analysis of the option of selling or leasing public lands slated for private use suggests it is usually more desirable to lease. Briefly, the advantages associated with leasing are: (1) it provides a hedge against inflation; (2) it maintains long-term control over the land; (3) it is attractive to a private investor since it reduces the debt service at the early stages of the project; and (4) proceeds from the land are greater with a lease. Possible difficulties with leasing land for housing, however, should be noted. Although land leases for commercial uses are common and well accepted, land leases for residential development are uncommon in California. Where homeownership is involved there may be problems of buyer resistance and

difficulties in arranging mortgage financing. This problem, however, is partially offset by the difficulty of qualifying new home purchasers for conventional mortgages. As a result leasing land for owner-occupied housing has recently increased rapidly, though it still accounts for only a small proportion of new homes, since a developer can offer lower monthly payments in the early years of debt service.

It appears therefore, that it is in the public entity's interest to lease land intended to be used exclusively for commercial purposes. Investigations on a case-by-case basis are needed to make this decision for residential development.

DEVELOPMENT ROLE

The university's role in development can either be as developer, as is the case in construction of most on-campus facilities, a joint venture partner with a profit or non-profit corporation, or solely as lessor of the land. The appropriateness of these choices varies according to the type of facility and use to be developed.

For construction of on-campus academic and campus support facilities the university's normal developer role is appropriate with one possible exception. As is discussed later, the university could lease campus lands, such as the Crescent area, for construction and operation of parking facilities. Advantages of this approach include the provision of campus serving parking without use of university bonding, which periodically is limited, and a pricing system which requires auto users to pay the true cost of the parking facilities. Private ownership and operation of the parking facility also would facilitate its use for downtown parking during off-peak campus demand periods and produce additional revenues to increase the economic feasibility of the project.

Where the university or other public agencies intend to use the land for private, commercial or residential purposes, leasing of the land rather than a joint development or build and leaseback, is most advantageous. Through the land lease the university can impose the same conditions or controls as it would in a joint venture or developer role. In turn, it would avoid university involvement in a highly competitive business in which it has no prior experience and no current in-house capabilities. Moreover, it would eliminate the need for the university to involve itself in on-going leasing, building management, and maintainance functions.

A similar case can be made where the university might intend to construct off-campus space for its own needs and incorporate additional space for private use. The university could lease the land to a private developer, specify its development and lease conditions, and leaseback space needed for university purposes. Under these arrangements a private developer can normally construct buildings in a more cost-effective manner than the university and can take advantage of the tax deduction from depreciation. Once again this method eliminates the need for the university to become involved in the leasing and management of commercial space.

In the event the university, or other public body, elects to incorporate private commercial uses into an existing building or building addition, consideration should be given to sale of the building and leaseback of the publicly used space. This arrangement could be financially advantageous to private investors who can realize the tax benefits of building ownership. At the same time it would produce an immediate source of revenue for university programs, provide a source of equity capital, and avoid university involvement in commercial leasing and management.

Finally, there are several situations, such as the University Garage and UC Printing Department sites, where

coordinated development of university and contiguous sites would be advantageous. For example, construction of a hotel/conference facility on the UC Printing Department site is not practical unless adjoining lands owned by the Bank of America are included. Again, use of a land agreement is recommended with the university stipulating in its joint venture agreement design, finance, and building space lease conditions.

POTENTIAL CITY ROLE. The analysis of existing land use, current levels of investment on downtown land, and market potential suggest major changes will occur in downtown Berkeley in the next 10 to 20 years. However, a review of current city planning policies and development regulations indicates the city currently is not in a position to guide these changes in a manner which will promote an economically viable and attractive downtown. The city could correct these deficiencies by taking the following actions.

1. Prepare a plan for downtown which will establish clear and consistent policies for land use, circulation, urban design, and historic preservation. (If prepared as a specific plan, state legislation permits recovery of the plan preparation cost by charging developers seeking governmental approval a prorated fee based on the benefit received from the plan.)

2. Based upon the downtown plan, revise the city's development codes to provide land use, height, parking, design, and historic preservation provisions.

3. Prepare a companion capital improvement program addressing roadway, transit, parking, landscaping, and open space needs specified in the downtown plan.

4. Prepare a financing program specifying financing mechanisms and strategies for public and private sector improvements.

In addition to these steps, the city could take an active development role in downtown by developing the city-owned parking lot on Oxford Street for public and/or private uses desired in downtown. This possibility is discussed more fully in a later part of this chapter.

POTENTIAL PRIVATE SECTOR ROLES. The future of downtown and the west side depends upon a high degree of consensus and cooperation between the private and public sectors. For a downtown plan to succeed, there must be meaningful participation by downtown property owners and business persons as well as by citywide community interest groups. It is essential that the city's planning process be structured to involve both citywide and downtown interests in the examination of development alternatives for downtown. It is equally important that these interested or affected groups take an active role in implementing the plan through common actions such as creation of assessment districts, establishment of a development corporation, and other joint promotional or improvement programs.

Finally, the private investors and builders could participate directly in development of publicly-owned lands through joint development or joint venture agreements with the univeristy and the city. The following discussion of development options for university and city-owned properties identifies a wide range of opportunities for this type of participation to occur.

ASSESSMENT OF OPPORTUNITY SITES

The assessment of site development options includes on-campus and off-campus properties in the study area. The on-campus assessment examined the suitability of potential sites for new, expanded, or relocated campus uses. These latter investigations dealt primarily with the adequacy of potential sites to accommodate planned or proposed university uses and the design compatibility of new structures to the building and open space features of

the campus and adjoining areas. The on-campus sites discussed below are those judged to be suitable as development sites. This does not imply, however, that construction on all these sites is required to meet university space needs. The intent instead is to identify alternative sites which should be considered at the time the university is selecting locations for specific facilities.

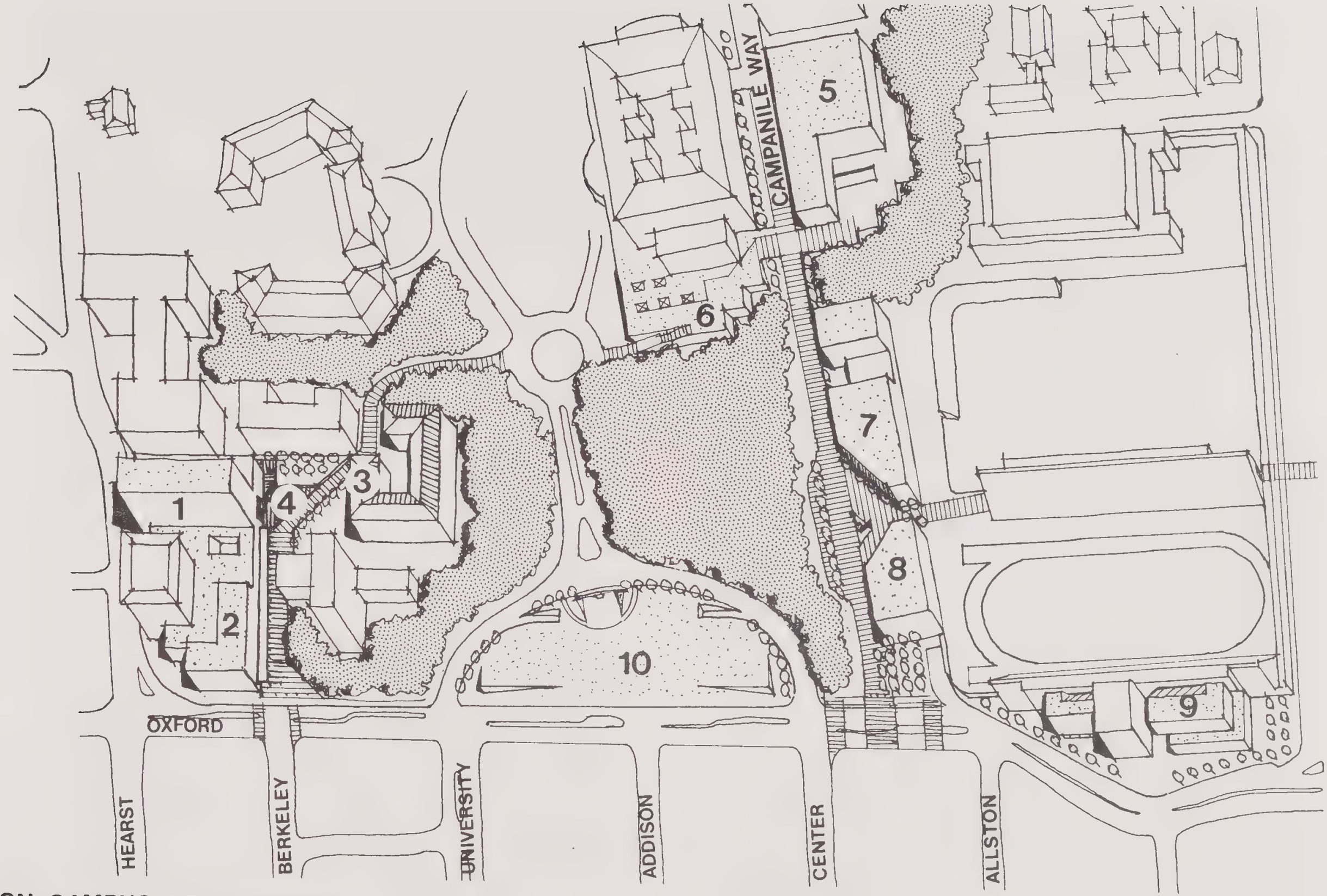
Off-campus sites were considered where justified by prior economic, transportation, and design investigations. For off-campus sites, the investigations examined the economic feasibility of the choices, the revenue potential of ground or building space leases for university and city properties, the tax revenue potential for the city and other taxing agencies, and the consistency with the objectives and development and conservation recommendations presented in Chapter III.

ON-CAMPUS DEVELOPMENT SITES

A number of development zones have been identified for potentially increasing the intensity of academic/research activity on the west side of campus: the northwest corner of campus, the Campanile Way corridor, the U.C. Extension Building area, and the Crescent area. All of these areas are within the campus precincts 4 and 5. Table 3 identifies university expansion needs and priorities. (See accompanying figure for an illustration of the development programs for each of these sites).

ON CAMPUS DEVELOPMENT SITES	APPROXIMATE BUILDING SIZE	HEIGHT PROVISIONS	PARKING PROVISIONS
1 HEARST STREET SITE	100,000 to 150,000 gsf	5-6 Story (between Tollman and Biochemistry)	2 Levels--Approximately 200 Spaces (greater if parking extends beneath Quadrangle)
2 OXFORD STREET SITE	90,000 to 100,000 gsf	Less Than Biochemistry	None Specified (potentially integrated with adjacent Hearst Street site)
3 MULFORD HALL SITE	Not Specified	3 Story	None
4 QUADRANGLE	—	—	—
5 DWINELLE HALL ADDITION	200,000 to 250,000 gsf	4-5 Story	None
6 LIFE SCIENCES ADDITION	Not Specified	2 Story Maximum	2 Levels--Approximately 150 Spaces Possible in Lieu of Academic Space
7 CALLAGHAN HALL SITE	100,000 to 130,000 gsf	5-6 Story	2 Levels--Approxmiately 200 to 300 Spaces Set Into Sloping Site
8 NORTH EDWARDS FIELD SITE	100,000 to 130,000 gsf	5-6 Story	2 Levels--Approxmiately 200 to 300 Spaces Set Into Sloping Site
9 EXTENSION BUILDING AREA	90,000 to 110,000 gsf Addition or 150,000 gsf New Structure	Less Than Stadium Structure	None Specified (possibly integrated below grade with new structure)
10 CRESCENT AREA	None	Below Grade	2 to 3 Levels--Approximately 250 Spaces

gsf = gross square feet



ON-CAMPUS DEVELOPMENT SITES

NORTHWEST CORNER SITES

SITE CHARACTERISTICS. The northwest corner of the campus is characterized by a loose collection of modern buildings lacking strong relationships. A large proportion of this area is occupied by parking lots (223 automobile spaces and 14 motorcycle spaces) which lack transitions to the buildings. The buildings vary in height from three stories (Mulford Hall) to seven stories (Biochemistry Building). The university is currently developing a program for approximately 170,000 gross square feet of new space for a Biochemistry Annex (Genetics and Plant Biology building) to be located in this area.

A major landscape resource is located west of Warren Hall. A gently contoured grassy "bowl" has been successfully integrated spatially into the low-rise wing of Warren Hall. The open space is augmented with a significant stand of native oak and ornamental conifers and Eucalyptus trees.

DEVELOPMENT OPTIONS. Three specific building sites are shown in the northwest corner organized around a central pedestrian quadrangle. Not all of the sites are necessary to complete the complex of structures. The intent of the siting is to spatially define a central quad which unifies the existing disparity among the architectural facades facing the quad to create a precinct center, and to redirect pedestrian movement off-campus from the Oxford-Hearst intersection to Berkeley Way.

Hearst Street Site. A five to six story structure on top of a podium level will integrate the new structure visually with Tolman Hall and the Biochemistry Building. The structure could provide up to 100,000 to 150,000 gross square feet of space on top of a two story parking structure providing approximately 200 spaces. A larger building envelope would be achieved by building below grade in the quad area, retaining the pedestrian open spaces above. The overall height of the building should be between the heights of the adjacent Tolman Hall and the Biochemistry Building. Major entrances should be oriented to the south side facing the new quad. Service access should be integrated into the parking structure below and should be accessible from Hearst.

Oxford Street Site. A maximum four to five story structure at the corner of Oxford Street and Hearst could provide up to 90,000 to 100,000 gross square feet of space. The structure should be located as close to Oxford Street as feasible to help define the new major pedestrian entrance at Berkeley Way. The height of the building should be less than the Biochemistry Building to provide a transition to the campus edge and to more directly relate to the permitted height of potential structures on the west side of Oxford Street. The building should be physically integrated at its base with the Biochemistry Building so as to redirect pedestrian movement to Berkeley Way. The service access to the Biochemistry Building can remain in its present location and service integrated with the new structure from the same point. However, the new structure should screen this service activity from the street. The new structure should form the northern boundary of the grassy "bowl" and the exterior pedestrian movement should be compatible with the informal qualities of the landscape to the south.

Mulford Hall Addition. A maximum three story addition to Mulford Hall could provide approximately 30,000 gross square feet of additional space. The addition should be compatible with the existing architectural character and detailing. The north face of the new wing should be oriented to the new quadrangle. The wing should be located to maintain an interior courtyard that is wider than the structure is tall to ensure a quality exterior space compatible with the horizontal lines of the original building.

The Quadrangle. The quadrangle that results from completion of the architectural assembly in the northwest corner of the campus should provide a focus for a precinct center. Food services should be incorporated into the new structures in order to take advantage of a sunny, protected exterior space. Outdoor eating areas should be integrated into the quadrangle but not conflict with the major pedestrian movement patterns. Formal landscaping should be introduced to unify the space and visually link the various facades. If a parking level is extended beneath the plaza, care should be taken to relate the elevation of the plaza level with the entrances of the adjacent buildings.

COMPARISON OF OPTIONS. Either of the two major new building sites is adequate to accept the building program for the Biochemistry Annex structure. Priority should be given to developing the Hearst Street site first, in order to give maximum definition to the quadrangle and establish its function as a precinct center. The potential building sites at Hearst and at Oxford are substantially larger than the proposed organismal biology program. The university should consider locating a larger portion of the total 360,000 gross square feet of new structure planned to supplement the biological sciencies facilities in the northwest corner. This would serve to reduce the physical impact of additional buildings proximal to the Life Sciences Building.

The proposed height limit at the potential development sites would help to obscure the vertical prominence of the Biochemistry Building. It would also provide a more pedestrian oriented edge to campus by screening service areas and clarifying pedestrian entrances, and would retain direct solar access to the quadrangle.

The proposed parking structure beneath the Hearst Street site would potentially replace the parking places lost to development in the northwest corner. The major landscaping resources west and south of Warren Hall would be retained. And the overall building coverage ratio for precinct 5 would remain substantially below the 25 percent maximum adopted as a campus limit.

CAMPANILE WAY CORRIDOR SITES

SITE CHARACTERISTICS. An extension of Campanile Way, from its present terminus at the memorial bridge, across Strawberry Creek to Oxford Street establishes a strong lineal organizing element on which to locate additional academic/research structures. Two major open spaces following the course of Strawberry Creek form highly contrasting natural landscapes with the proposed urbanized sites. The Grinnel Natural Area north of the existing cross campus road and the glade west of Dwinelle Hall parking lot are significant campus resources. Between memorial bridge and Oxford Street, the proposed Campanile Way falls approximately forty feet vertically in a distance of almost 800 feet (a five percent slope).

The proposed extension of Campanile Way is presently flanked by the Life Sciences Building, a five story structure; Callaghan Hall, a non-permanent one-story structure; and the Central Steam Plant, a tall one story structure. Bleachers for an exhibition tennis court are under construction to the northern edge of Edwards Field. A 10,000 gross square foot extension to the Steam Plant is proposed for construction in 1983 to house co-generating facilities. (The proposed location is on the south side of the existing plant.)

Two potential development sites defined in this report, the Dwinelle Addition and the Life Sciences Addition, are the subject of an EIR (environmental impact report) comparing alternative sites for proposed "Biological Sciences Construction and Alterations" (draft, February 1983). The development assessment that follows is an independent appraisal of the two sites reflecting the opportunities and constraints identified by the Consultant

as a part of the West Side Study and not the particular physical requirements of the building program assumed in the EIR.

DEVELOPMENT OPTIONS. Four specific building sites are shown along the extended Campanile Way. They are organized along a pedestrian spine, flanking the natural features of Strawberry Creek. They are intended to complete the axial development of Campanile Way with a major pedestrian entrance at Oxford and thereby, integrate the historic organization of the classical elements of the campus with the downtown. The aging Monterey Pines directly adjacent to cross campus road are expected to continue to be thinned and trimmed. Landscape modifications to this natural area should be limited to restorative and revegetative measures and should preserve the axial view down Campanile Way to the Golden Gate Bridge.

Dwinelle Addition. Opposite the Life Sciences Building on top of the parking lot west of Dwinelle Hall is a potential building site. A four to five story structure in this location could provide approximately 200,000 to 250,000 gross square feet of space while respecting the following design constraints:

- maintain the present setback from Campanile Way established by Dwinelle Hall
- maintain the same height as the north wing of the Dwinelle Hall
- provide an articulated facade on the south side creating a series of informal outdoor spaces related to the vegetation defining the course of Strawberry Creek.

The existing row of pollarded Sycamore trees on both sides of Campanile Way should be supplemented with like kind planting to reinforce the formal axial geometry of Campanile Way. Service access to the building should be from the remaining segment of cross campus road with an outlet to the east and one adjacent to Harmon Gym.

Life Sciences Addition. An extension to the west end of the Life Sciences Building has been studied in numerous campus planning documents. The potential site defined here is limited to a podium level structure no more than two stories above the existing grade on the exposed side adjacent to Strawberry Creek. The podium should be linked to the existing structure providing a stepped base to the existing building and should not encroach beyond the present location of the surface parking lot to the west of the Life Sciences Building. It should maintain a clear and convenient north-south campus pedestrian crossing. The structure could be developed as a two-story parking facility for approximately 150 spaces with a pedestrian plaza area developed on top. Alternately, the enclosed volume could be developed as academic/research space in connection with the remodeling of the main structure.

Callaghan Hall Site and North Edwards Field Site. These two potential development sites should be confined to five to six story structures on the south side of Campanile Way and face directly onto the new pedestrian route and Strawberry Creek beyond. Each site would provide up to 100,000 gross square feet of space developed at five stories, and up to 130,000 square feet developed at six stories. The structures should maintain the same setback from Campanile Way that Dwinelle Hall has established. As a major pedestrian entrance to the campus, the pedestrian corridor should provide a primary connection between BART and downtown, and the central development around Sproul Hall to the east. It should also provide a major pedestrian entrance to the sports fields.

A formal entry plaza should be provided at the end of Campanile Way at Oxford Street that promotes a concentrated pedestrian crossing into the downtown area.

A two level parking structure can be integrated into the potential academic/research sites providing between 200 and 300 spaces. The sloping site would permit easy access from Oxford Street directly into the lower level.

COMPARISON OF SITES. The Dwinelle addition site more than adequately meets the indentified space needs for the academic functions presently housed in the main structure. The addition also would provide an opportunity to assign additional academic units to this location, thereby relieving over-crowding elsewhere. The Callaghan Hall and north Edwards Field sites provide two distinct building opportunities matched in scale to the size equired for the graduate School of Business Administration, though no specific assignment is intended in this analysis. The Life Sciences addition discussed here is a much smaller site than that explored by previous planning studies. The 121,000 gross square foot program evaluated in the Kaplan McLaughlin Diaz review of the Life Sciences facilities as well as the much larger program developed for this site as currently proposed, and the subject of the draft EIR cited earlier, are judged to be significantly too large for the site. The enormous perceived mass of the Life Sciences Building and the proximity of the Eucalyptus grove would make a substantial addition here clumsy and would detract from the dramatic scale of the landmark tree grove. As viewed from the central glade, a six or seven story addition to the south side of the Life Sciences Building would dramatically eclipse the view of the Eucalyptus grove and enlarge an existing structure out of scale with the existing campus development.

Other factors significant to the assessment of these sites include the following.

- The utilization of all the sites identified would result in a potential loss of 198 parking places. Replacement of parking beneath the north Edwards Field site and at the Life Sciences Building site would result in total of 350 to 450 spaces.

- Closing cross campus road to direct access at Oxford will require that the interior portions of this area of campus be reached from Bancroft Way entrances.

- Construction below grade in the area of the cross campus road may require the relocation of existing fuel storage facilities serving the central steam plant.

- Care should be taken to protect against adverse hydrostatic pressure from the adjacent high water table and from potential flooding in the area of Strawberry Creek.

- The development of building sites along the south side of Campanile Way will increase pedestrian traffic in the area and is expected to improve personal safety.

- Because of the protected natural landscape areas, the overall building coverage ratio for this precinct would remain substantially below the 25 percent maximum adopted as a campus limit.

EXTENSION BUILDING AREA

SITE CHARACTERISTICS. The existing 2223 Fulton Building is a six story structure with 50,668 gross square feet. The structure divides into two unequal portions a total land area of approximately one acre. The present coverage is about twenty percent.

The existing backdrop to this area is the back side of the concrete stadium for Edwards Field. This imposing facility has a dramatic scale and a strong rhythmic structure with deeply recessed bays creating patterns of

dark shadows and silhouetted structural elements. The existing building, utilized presently by U.C. Extension, has no distinctive architectural value and is unfortunately sited to obscure the imposing bleachers behind.

The open space areas surrounding the Extension Building are planted with mature specimen evergreens. Unfortunately, even the mature trees fail to integrate satisfactorily the existing structure into its setting. The undeveloped areas to the north and south are presently utilized for surface parking and provide a total of 32 marked spaces. Space under the stadium is utilized by the Department of Facilities Management for a staging area.

DEVELOPMENT OPTIONS. An addition to the existing building could be built in order to more directly relate the resulting form and mass to the imposing stadium behind. A four to five story structure utilizing buildable space to the north and south would add between 90,000 and 110,000 gross square feet of space to the existing 50,000. Alternatively, the existing structure could be removed and the site devoted to a new building. A building with 150,000 gross square feet would be equivalent to an FAR of about 3.2 and not out of scale with the proposed development intensity in the downtown. The key provision of any new structure would be to remain lower than the top of the adjacent stadium.

COMPARISON OF DEVELOPMENT OPPORTUNITIES. This key corner to the main campus represents both an opportunity and a dilemma. Its position at the edge of downtown makes it highly accessible. The dramatic concrete stadium sets up a site planning opportunity whose realization requires a strong relationship to both the street and the stadium. The dilemma lies in that the existing structure is not distinguished but is servicable.

Ideally, the existing structure would be removed and an entirely new structure built that can command this key corner. Short of that, additions could be made to strengthen the street facade and achieve a scale and mass more in keeping with the existing backdrop.

A total of 32 parking places would be lost with development of the site. These would need to be replaced in some alternate location.

CRESCENT AREA

SITE CHARACTERISTICS. The Crescent occupies approximately 2.2 acres of land and serves as a major open feature of the campus. It plays a key role in promoting a highly evident demarcation between the campus and downtown Berkeley.

DEVELOPMENT OPTIONS. Several options for the Crescent area were explored during the West Side Study, including use of a portion of the site for academic buildings. The prevailing opinion of the participants in the study meetings and workshop was rejection of uses which would intrude into this open space and a desire to maintain the sharp visual contrast between downtown and the campus produced by this open space. Studies have indicated, however, that subsurface parking could be provided here and still retain, and even reinforce, the open space function and appearance. Approximately 250 parking spaces could be provided. Access would be limited to the Crescent Drive to minimize traffic conflicts along Oxford Street.

Parking on this land could serve a number of purposes. First, it could enable the removal of short-term visitor parking from other less desirable areas of the campus. Parking here could also be used to help implement other programs. For example, reuse of the UC Garage site requires relocation of the garage function to the lower level of the UC Parking Structure at Addison and Oxford Streets. This, in return, necessitates replacement of the parking spaces eliminated in this transfer of function. The Crescent site could be used to accommodate this

relocation need. Similarly, construction of a 250 room hotel would require provision of approximately 150 to 200 parking spaces. A portion of this parking need could be met by the parking structure beneath the Crescent, thereby providing greater design flexibility on nearby hotel sites and improved project feasibility.

The university should consider granting a ground lease to a private firm for purposes of constructing a private parking structure. As a part of the development package the university would have rights to a specified number of spaces for university needs during the times of peak campus demand.

COMPARISON OF OPTIONS. Development options for the Crescent Area have been assessed for their economic feasibility, revenue potential, and consistency with study objectives and guidelines.

Economic Feasibility. The economic feasibility of structural parking is marginal. Calculations shown in Appendix B indicate a monthly revenue of $98 per space is required if per square foot construction cost average $25.00 and there is no land cost. This revenue requirement is substantially higher than the $15.00 monthly fee for each space presently charged to university faculty and staff. The $15.00 monthly fee represents a substantial subsidy from the university when compared with the revenue required to support the development of additional parking. This level of revenue would only be possible with short-term parking which could charge a higher rate than long-term parking. The anticipated university use would be limited to short-term parking and require a hourly rate of 50 to 60 cents. A higher than normal use of the parking during evenings and weekends is possible due to the sites proximity to the concentration of theaters in downtown Berkeley and university athletic facilities. Additionally, some of the space might be assigned for use to commercial or hotel space on university-owned sites along Oxford. This may be sufficient to make the project feasible.

It appears that project feasibility will be closely linked with other university development projects and the final determination of feasibility will depend on ground lease and building sale conditions on the UC Garage, University Hall or UC Printing Department building sites.

Revenue Potential. Potential direct revenue returns to the university would be minimal even with charging market rate fees for short-term parking of 50 to 60 cents per hour including evening use. The major advantage for the university is the opportunity to attract equity capital for construction of short-term campus visitor parking which probably would not otherwise be built because the university periodically can not attract buyers for its bonds. When bond rates go down or the interest ceiling is raised, the university can sell more bonds. Additional provision of parking in the Crescent area could be the means of improving project feasibility for other university sites, thereby indirectly achieving revenue benefits from those properties. The city would benefit from property taxes produced by the privately-owned structure costing approximately $2.2 million. The level of property taxes produced, however, will depend upon the number of spaces reserved for exclusive university use.

Consistency with Study Objectives and Guidelines Overall this project would be highly consistent with both study objectives and guidelines. The major issue is one of design and the affect of design requirements on project feasibility. Construction should be limited to a subsurface or partially subsurface structure terraced to fit the existing land contours. Roof surfaces should be landscaped predominantly with grass surfaces to maintain the existing park-like quality.

OFF-CAMPUS DEVELOPMENT SITES

OXFORD TRACT

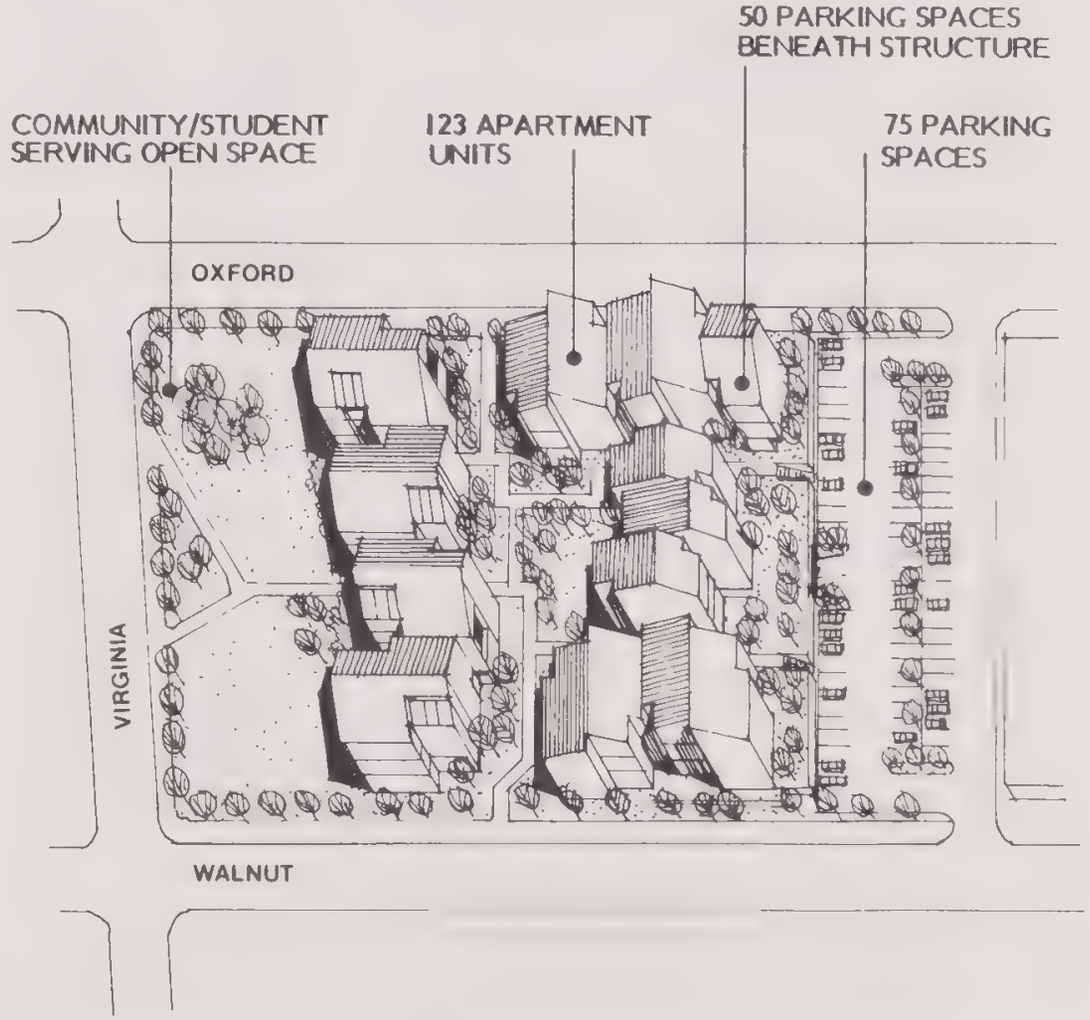
SITE CHARACTERISTICS. The Oxford Tract is a 6.2 acre site occupying an entire city block northwest of the main campus.

Site Improvements. The southern half of the tract contains two greenhouses, a glasshouse (used for storage), an open air lath house, a headhouse for the greenhouses, an insectory with labs and offices, the recently completed Natural Resources Laboratory, the Oxford Reserach Unit (combination greenhouse-headhouse), a Pesticides Storage Facility, and some minor, temporary structures. All are wood frame, one-story structures, except the two-story Oxford Research Unit.

Current Uses and Restrictions. The tract is under the control of the College of Natural Resources (CNR) and the structures on the southern half are specifically used by the following departments: Entomological Sciences, Plant and Soil Biology, Forestry and Resource Management, Genetics, and Plant Pathology. The undeveloped 2.5-acre northern portion is used for agricultural research by the Agricultural Experiment Station and the College of Natural Resources. A 3/4-acre portion is used as an experimental garden for CNR students. The Natural Resources Lab contains a P-3 laboratory, a designation which requires special containment practices to avoid danger from hazardous materials. The Long Range Development Plan (LRDP) indicates a major reserve building site and additional greenhouses on the northern half.

Purchase of the Oxford Tract was funded in part by donations which stipulated that they be spent to develop an agricultural experimentation area. The land could be put to another use as long as another site or development is substituted value for value. No assessment of available university-owned land onto which the agricultural use could be relocated has been undertaken and no reserach into the precise meaning of the legal constraints has been conducted.

DEVELOPMENT OPTIONS - NORTHERN TRACT. Three major options have been evaluated for the northern portion of the Oxford Tract to assess the opportunity for allocating this portion to a more intensive use than that represented by the current agricultural research station. In addition two more intense uses were more generally evaluated for a longer range development option for the southern half of the Oxford Tract.



OPTION A

Northern Tract Option A - Student Housing. In this option 2.5 acres of the Oxford Tract would be developed to the current university standards for new student housing. At a density of 200 persons per acre, 500 students could be accommodated in low-rise buildings. The structures would provide 125 units, 1000 square foot in size, in three-story wood frame garden-type apartments. A parking structure would be built under a portion of the housing to provide spaces for 50 of the 125 cars. University policy also includes design guidelines for the provision of recreational space on site.

The development arrangement assumes private development and management on land leased on a long-term basis from the university at no cost. This arrangement passes through tax deductions from depreciation to private investors and generates private equity investment for the development. However, two factors unique to development of student housing make construction of new student housing financially infeasible for a private developer without substantial subsidies. The high assumed debt cover ratio[1] and the low rent level relative to development costs[2] produce an unusually large equity requirement of almost $4.5 million (43 percent of total development cost) and reduce projected returns over a 10-year period.

In addition to provision of land at no cost, use of private equity capital would require additional subsidy from the university. To attract private investment and allow for an attractive after-tax return over 10 years, rents need the capacity to increase up to 7 percent per year. A 7 percent annual increase may exceed university affordability criteria for student housing rents. If so, the university could subsidize rents according to conditions and procedures set forth in the ground lease. Other cost reduction measures include a decrease in on-site parking and a decrease in the size of the units.

Northern Tract Option B - Faculty Housing. In this option a much smaller portion of the Oxford Tract would be developed as family housing in a program targeted for junior faculty. The university has estimated the current need for 42 faculty housing units. A number of these will be located at the Dwight-Derby (former schools for the deaf and blind). As a potential first increment of development, a program of twenty-two bedroom units would be built as attached townhouses at a density of 16 units per acre. The housing density could be substantially increased in conformance with current policies in the City's Master Plan. The High Density R-5 District would permit four to six story structures at a density of over 240 per acre. The university could target this housing for faculty housing without children at comparable densities. The development site would occupy land at the extreme northern end of the Oxford Tract. One parking place per unit would be provided as surface parking and would be distributed along the site.

This project could be undertaken as either a rental or condominium program. Rental housing concepts assume private development, ownership, and management on land

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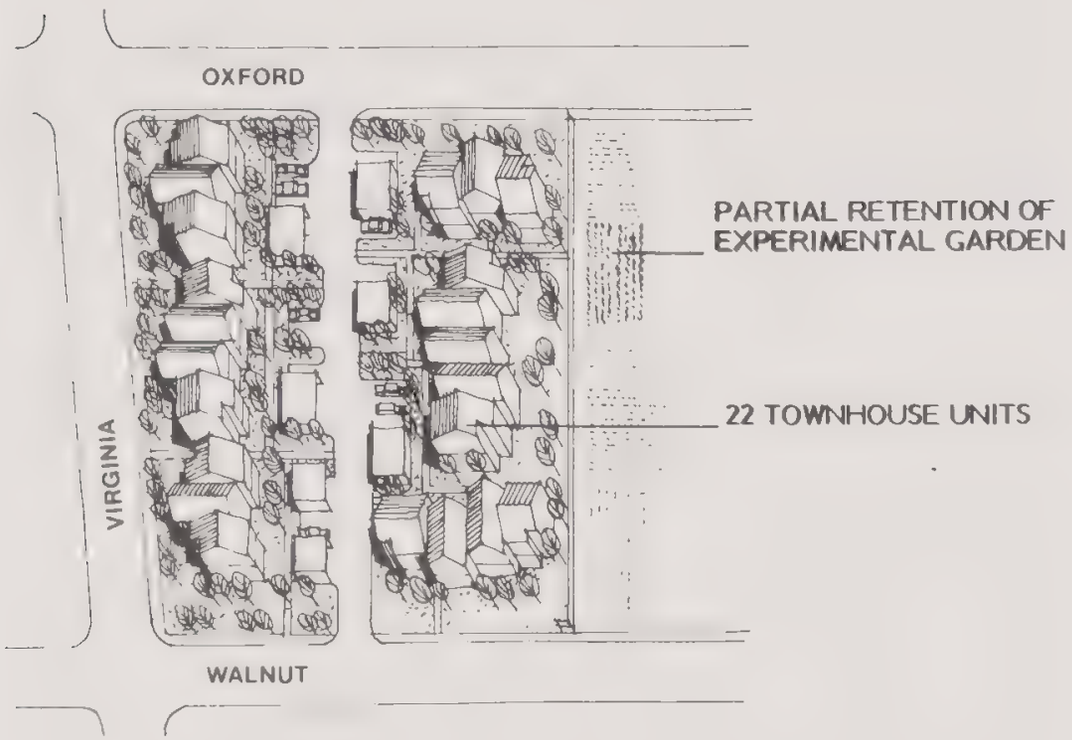
1 Financing terms for the pro forma assume a debt coverage ratio of 1.35. A debt coverage ratio of approximately 1.35, but not lower than 1.25, is anticipated to be required by the financial institution issuing the bond. This is also specified in the university's current bond indenture for student housing. A lower ratio would be possible only if the university guaranteed the loan by assuming some of the risk associated with the project or agreed to manage the properties and thereby, reduce the developers costs.

2 As shown in Appendix B, rent affordability is assumed at $175 per month per student or $700 per unit per month, as reported by the Berkeley Campus Housing Office.

leased from the university on a long-term basis. Condominium pro formas assume sale of the land to the developer with deed restrictions regarding home prices. Several problems with financing owner occupied housing on leased land limit the potential of such leases for condominium use in the near future, especially when non-faculty housing is included.



OPTION B

Each concept assumes that the university would purchase a portion of the units from the developer and lease or resell them to faculty, according to prespecified terms in the ground lease or grant deed. The university could also maintain first right of refusal on non-faculty units as they turn over. This arrangement has several advantages:

- financially efficient larger complexes
- provision of moderately-priced housing for the non-university community
- avoidance of the negative image of a "faculty compound."

The use of 30-year, fixed-rate, tax-exempt financing issued by the university or the City of Berkeley is assumed in pro forma analyses for rental and condominium housing. Although continuation of tax-exempt status for mortgage revenue bonds beyond January 1, 1984 is not assured, future availability of some form of tax-exempt financing seems likely.

The concept of mixed faculty-student housing was not analyzed because it seems unattractive. Design of a mixed development would be more complex since faculty and students have different lifestyles and expectations. More importantly, however, a mixed faculty-student development could encounter significant marketing problems.

Northern Tract Option C - Private Market Housing. In this option the entire 2.5 acre site would be developed to provide a major new housing supply for the private market. A land lease arrangement would be possible to attract private equity to build low rise apartments or condominiums with parking provided in a combination of structure and surface lots. The units would be 800 square feet and the overall project density would be 30 units per acre.

The university could retain rights to a specified number of units for faculty and right of first refusal as other units come back on the market in the future.

Development of moderately-priced housing on the north end of the Oxford Tract appears financially attractive to both a private developer and the university for the following reasons:

1. The site is an excellent location for high-density development with smaller units.

2. The site is flat, presents no unusual construction problems, and is large enough to handle relatively inexpensive low-rise construction and surface parking, thereby reducing development costs per unit.

However, rental housing development on the Oxford Tract would not generate nearly as much ground lease revenue to the university as would commercial development. Pro forma analysis for rental housing assumes an average rent of $650 per month, with seven percent average annual rent inflation and lease of the land at an equivalent of $8.00 a square foot land value. This would constitute an indirect subsidy since the land has a high potential value. This yields an attractive after-tax 23 percent annual return for the owner. Even if rents were to increase by a lower average of five to six percent per year, the initial rate of return over a 10-year period appears high enough to attract a private developer.[3]

Appendix B projects the average low-income condominium sales price at $70,200, using identical design and construction cost assumptions. Minimum buyer income necessary to support the average purchase price, including debt service and condominium fees, would be $28,300.[4] This minimum income is not far above the 1982-83 average starting salary for assistant professors ($25,600). Since this sales price figure averages prices for less expensive one-bedroom units with more expensive larger units, and since many household incomes would exceed starting salaries, this average sales price appears accessible to most new assistant professors and their families. It should be noted, however, that this program assumes sale of the land at a discounted $10 a square foot.

COMPARISON OF OPTIONS - NORTHERN TRACT. Development options for the Oxford Tract have been assessed for their economic feasibility, revenue potential, and consistency with study objectives.

Economic Feasibility. Option A, for student housing, is not financially feasible without provision of land at no cost and additional university subsidy. A number of avenues are available for modifying the program to reduce this subsidy. These include: reducing the size of the units, increasing student fees for parking or reducing the number of parking spaces provided. The form of the subsidy can be manipulated as well. The univesity could improve the financial feasibility of this option by absorbing the costs associated with managing the housing units and by assuming a portion of the financial risk by guaranteeing the loan to the lending institution. One potentially viable arrangement would include a land lease to a developer-builder with a lease-back of the structure for the purpose of managing the property.

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3 This pro forma assumes 15-year straight line depreciation. If eventual resident income levels met then current low income definition, accelerated depreciation might be used. Accelerated depreciation would produce even more attractive after-tax rates of return for the owner.

4 Assumes a 90 percent loan, 12 percent fixed interest rate, 30-year mortgage, $125 per month condominium fees, and 33 percent of income for housing expenses.

The student housing option could be feasible for the private developer if the university is willing to alter the program or find some way to directly subsidize the project as outlined above. However, the terms of a subsidy agreement between the university and the private owner would need to be carefully structured to reward good design and management, and protect the university in the unlikely event the owner abandons the property. Terms which would protect the university and still attract a private owner/manager could be extremely difficult to negotiate, since the developer would be required to submit to a form of rent control. Thorough evaluation of the actual practicality of this concept is important, but beyond the scope of this study.

Option B for faculty housing is financially feasible with a partial writedown of the land.
Option C, market rate housing, is also financially feasible with a partial writedown of land cost.

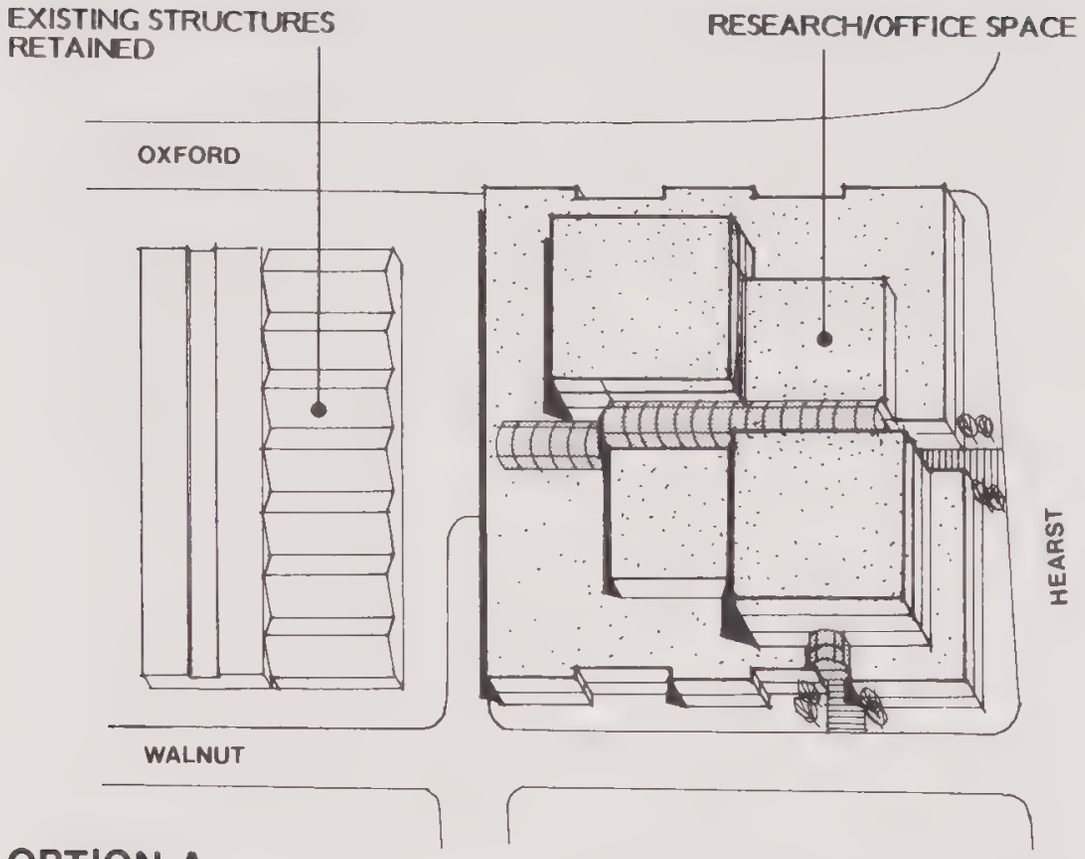
Revenue Potential. The revenue potential to the University for Option A, student housing, and Option B, faculty housing, is zero. However there is revenue potential for the city in the form of taxes on the value of the individual project. For the student housing option it would be on the capital investment of approximately $7.6 million. On the faculty housing option it would be on the capital investment of approximately $880,000.

Option C for market rate housing would provide the university with an annual ground lease revenue of approximately $87,000 for the first 5 years and $140,000 for years five through ten. Affordable condominium development would support a land value of $10 per square foot, a total sales price of approximately $1.1 million. Tax revenues from a combined land and site improvement value of $8.7 million would be possible.

Consistency With Objectives and Guidelines. All of the housing options would help promote city and university housing objectives. If student or faculty housing is privately developed this would produce additional property taxes, thereby promoting city fiscal objectives. However, as noted in the economic discussion only the faculty housing has potential for producing an income for the university through the lease of the land. Both housing options would foreclose, in varying degrees, opportunities to accommodate university teaching, research, and administrative functions. Analysis indicates, however, that there are ample sites for expanded teaching, administrative, and research facilities elsewhere in the west side--the sole exception being sites available for agricultural research purposes. Since exploration of alternative sites for the existing agricultural research use was beyond the scope of the West Side Study, it is impossible at this time to fully assess the trade-offs between housing and open agricultural research.

DEVELOPMENT OPTIONS - THE SOUTHERN TRACT. Three major development options for the southern portion of the Oxford Tract have been evaluated. Each of the options assumes a more intensive use of the land. In the case of development, some alternative location for the present academic function would have to be provided.

Southern Tract Option A - Research Related Commercial Development. The proximity of this portion of the Oxford Tract to downtown, BART access, and the university make the southern portion of the Oxford Tract an attractive site for private commercial development. As one of the few large parcels remaining in central Berkeley, it provides opportunities to accommodate office/research complexes which might have difficulty building on more confined sites. However, full use of the 6.2 acre site for private office/research is unlikely since the land value created by these features suggests development at FARs of 2 to 3. This level of development, when applied to the entire site would result in an addition of 87,000 to 130,000 square feet of building space. This amount of space is unjustified given the overall projections for the

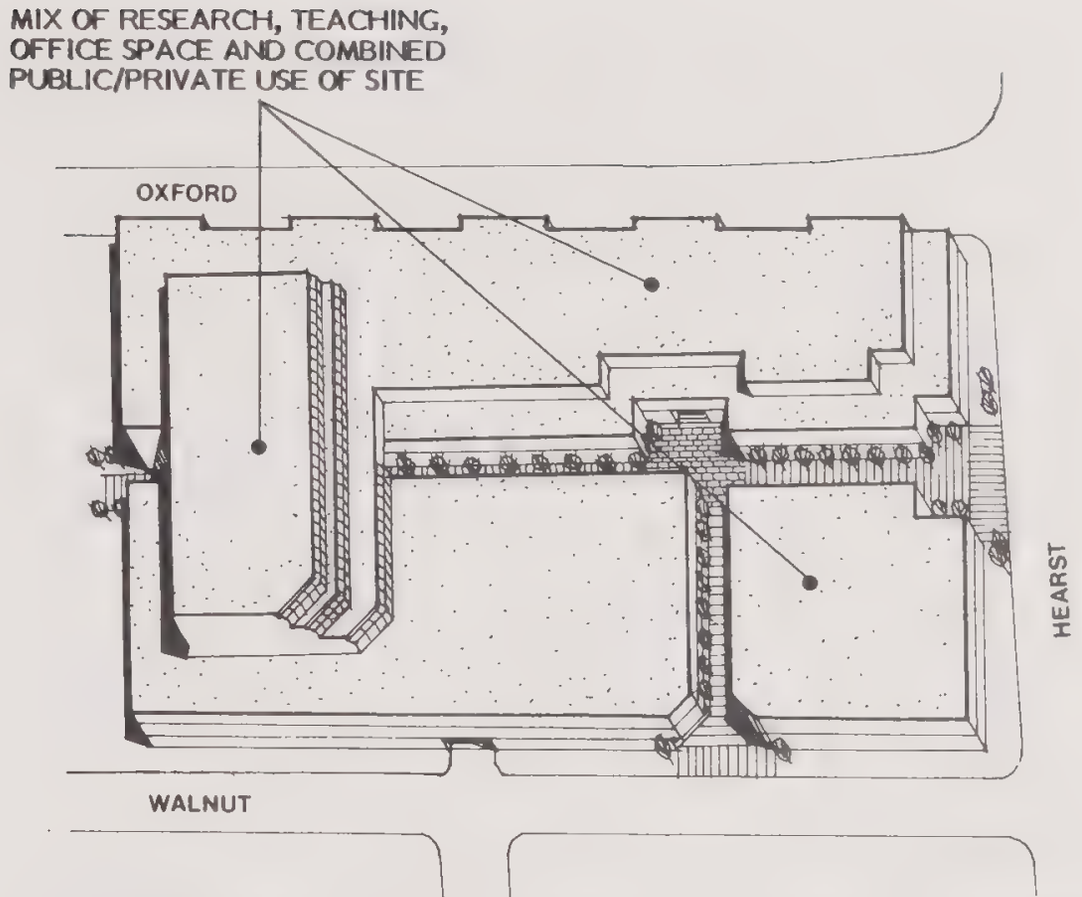


OPTION A

growth in office space in Berkeley for 1995. It would be more appropriate to limit private development to two or three acres.

Southern Tract Option B - Continuation and Expansion of Current University Research and Teaching. Existing academic and research functions could continue and expanded facilities provided by removal of marginal structures and better site utilization.

Southern Tract Option C - Mixed Use Combining University Research, Private Research, and Teaching. For the most part university structures occupying the south portion of the Oxford Tract have a low investment level when compared to other campus facilities or to commercial properties in downtown. This low level of use would permit more intensive use of the site for university



OPTION B

teaching and research functions plus complementary private research use. In exchange for development rights, a private entity might replace and expand university facilities on the site.

ASSESSMENT OF OPTIONS. Each of the three options for the southern portion of the Oxford Tract were assessed for economic feasibility, revenue potential, and consistency with study objectives and guidelines.

Economic Feasibility. While the location is ideal for highly-technical, research-oriented office users, other downtown sites are close enough to the university to attract such users. The draw for office space located on the tract would clearly be its size. The market could then be open to larger space users.

The example of Cetus Corporation's agricultural research operations in Madison, Wisconsin, has been raised during this study as a possible model for a private research corporation using university staff. The Director of Research for Cetus's Madison office is a half-time professor at the University of Wisconsin. Cetus leases only 10,000 square feet of space and it is located in Middleton, about five miles from the campus.

The economic feasibility of an academic facility depends to a great extent on the competition among all the university campuses for state funds for academic expansion. Conceiveably the proposed genetics and plant biology building program might be located at this site. One measure of the economic costs, however, that should be included in assessing this feasibility is the opportunity costs for firmly establishing the site for an academic function.

Revenue Potential. Annual ground lease income for Option A to the university for two acres would start at approximately $300,000; for three acres approximately $450,000, assuming land value at $35 per square foot and lease payments at 10 percent of value. City revenue from property tax on the land improvements would likely be calculated on the capital investment between $17 million to $39 million depending on the size of the project and the construction costs. In addition, the possessory interest in the land in a long term lease may range between $3.0 million to $4.6 million for a two acre and three acre project, respectively.

Option B, an academic facility for research or teaching, would generate no revenue to the university and provide no increase in the tax base for the city.

Option C would offer many of the advantages of Option A except at a reduced scale.

Consistency with Study Objectives and Guidelines. Option A, a research-related commercial development, helps to meet the objectives of encouraging commercial development while minimizing dislocation of residents or existing commercial interests. The research-related commercial has the potential secondary effects of increasing the base of the research community at Berkeley and infusing public investment with private capital in what might become a highly integrated research community. This potential relationship remains, however, a controversial one. Community concerns (and academic ones) not specifically evaluated in this study have been raised about the means of guaranteeing the independence of academic researchers in a climate where private funding takes on a more important role. The commercial use of this site runs counter to the city policy of utilizing the Oxford Tract as a housing opportunity, but is consistent with objectives of maximizing the city's property tax base.

Option B, a university research or teaching facility at this location, extends the academic function of the main campus beyond its present borders. The option is supportive of the objective to take better advantage of the downtown transportation facilities. However, it fails to respond city tax revenue concerns or to the need for the university to more fully benefit from its land resources.

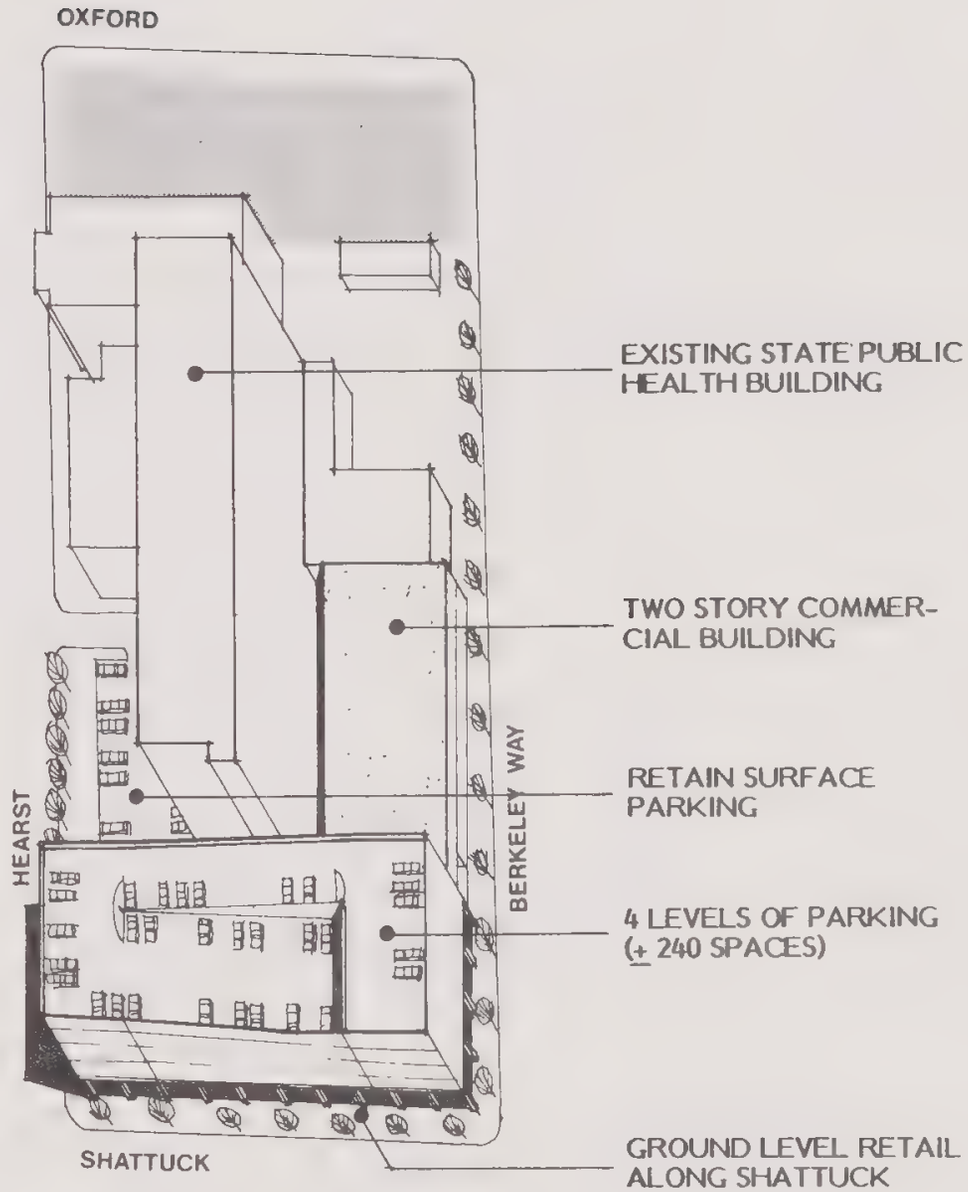
Option C would be supportive of both the university and the city's and university's economic objectives. All options are consistent with stated land use and urban design objectives.

STATE PUBLIC HEALTH BUILDING BLOCK

SITE CHARACTERISTICS. The 128,000 square foot block is divided into three parcels, the largest is the 106,000 square foot site occupied by the State Public Health Building. The remaining two privately owned parcels front on Oxford. One parcel is vacant and the other occupied by a gas station. A major portion of the state owned parcel, including the Shattuck Avenue frontage, is developed as a surface parking lot.

DEVELOPMENT OPTIONS. Commercial office use, with ground level retailing, is recommended for the privately-owned parcels on Oxford Street. Proximity to the campus make this site ideal for research oriented firms with ties to the university. Because of the proposed reorienting of pedestrian access to the northwest portion of campus by way of the Berkeley Way crossing, special attention should be given to the design of the building frontage along both Oxford and Berkeley Way and selection of uses to occupy ground level space along these frontages.

For the state owned land occupied by surface parking three options were considered, only one of which is judged to be feasible. Options explored were: (1) residential construction above a reconstructed parking area; (2) a commercial parking structure incorporating replacement parking for the present surface spaces; and (3) office construction with replacement parking in structure. The housing option has been rejected because the cost of constructing replacement parking, which would be the equivalent of the cost of land assuming the state would grant a ground lease at no cost, is approximately $25 a square foot. Even assuming high density development of 40 to 50 units per acre these costs plus the high cost of structural parking for resident use would only permit construction of high cost housing. The only possible benefits produced would be increased tax revenues to the city and other taxing bodies. It is doubtful, however, that high cost housing could be marketed successfully on this site.



PARKING STRUCTURE (with commercial frontage)

Similar problems were encountered in the analysis of commercial parking. An analysis of the feasibility of parking construction, reported in Appendix A, concludes a monthly revenue of approximately $98 per space would be required. It is unlikely that this location, which is not well located for short-term parking, could produce sufficient revenues from long-term parking use to support the project; even though the site represents a key opportunity to establish a parking reservoir convenient to both the downtown and the North Shattuck shopping area. The accompanying figure illustrates how a parking structure could b integrated into the Shattuck Street corridor.

The only option which appears feasible is construction of commercial office space at a FAR of approximately 4. This would permit construction of 80,000 to 85,000 square feet of commercial space and require construction of a two level parking garage accommodating 120 spaces.

COMPARISON OF OPTIONS. Development options for the State Health Building block are discussed below.

Economic Feasibility. As just discussed the commercial office space option appears to be the only economically feasible choice under current and anticipated market and financing conditions. This site would be very competitive when compared to other potential sites. Its location within two blocks of the downtown BART station coupled with its proximity to the North Shattuck commercial development would make this site attractive to investors. Economic success of this venture would also necessitate modest ground lease terms with the state.

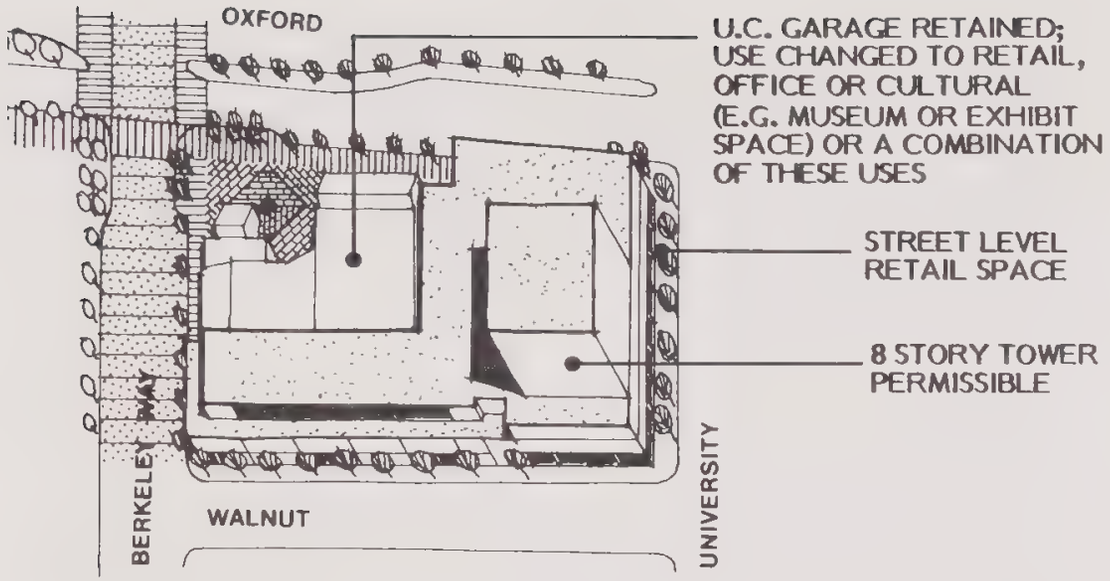
Revenue Potential. Short term revenue gains for the state would be low in order to maintain a low cost ground lease to ensure economic feasibility of the project. In the long term these revenues might increase if downtown Berkeley's role as a region-serving office center becomes well established and commercial rents increased significantly. The chief beneficiary would be the city and other taxing agencies. The development could generate increased tax base in the order of $8 million.

Consistency with Study Objectives and Guidelines. In general, development of office space on the state lands would promote the stated objectives. One possible conflict, however, should be noted. Due to the depth of the buildable area there would be pressure to design a building with the first two levels devoted exclusively to parking to avoid the cost of underground parking. This would eliminate provision of retail space along Shattuck Avenue and would be in conflict with the guideline specifying this frontage as a secondary retail area. More detailed design and economic studies would be required to determine if alternative design solutions are feasible.

UC GARAGE SITE

SITE CHARACTERISTICS. The UC Garage site includes the 14,500 square foot parcel occupied by the UC Garage and four privately-owned parcels totalling 25,500 square feet in land area. In addition to the UC Garage there are two wood frame residential structures on small 45 by 50 foot lots, a one story reinforced concrete commercial building, and a gas station. The UC Garage has been designated a local historic landmark by the Berkeley City Council. The two residential structures have been identified as potentially eligible for the National Register of Historic Places by the Berkeley Architectural Heritage Association (BAHA).

DEVELOPMENT OPTIONS. Current underutilization of the land, by both the university and private owners, makes this area attractive for reinvestment and intensification of development. At the same time this potential for development leads to conflicts with preservation objectives. Two options have been considered, each of which is described below.



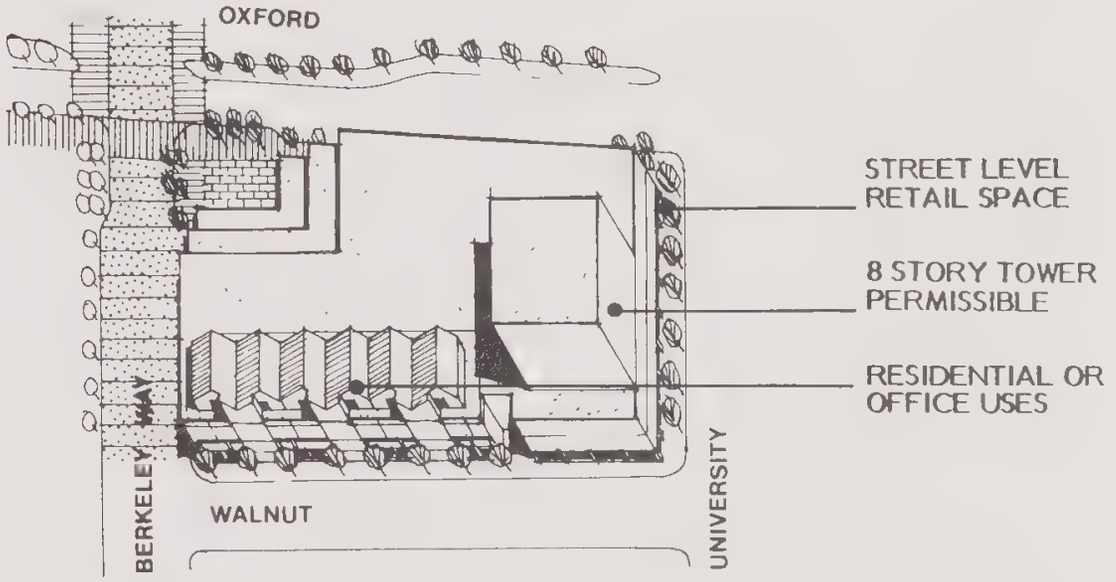
OPTION A

Option A - Preservation of UC Garage Structure. This option would retain the UC Garage structure, but alter its use and transfer unused development rights to contiguous parcels. The two wood frame residential structures could either be retained and rehabilitated or moved to suitable sites elsewhere in the city. The UC Garage space could be converted to use for university administrative or other support functions (e.g., museum use) or retail or other commercial use. This would require relocation of the UC Garage functions. The lower level of the UC parking structure is proposed for this function. The land fronting on Walnut Street has potential for residential use but the shallow lot depth along this frontage is not adequate for construction of housing. Transfer of development rights from the garage site to two contiguous properties along University Avenue would require construction of a nine story slab building along the University Avenue frontage if the height recommendations of preceding sections of this report are adhered to. This would further limit opportunities for residential use of the Walnut Street frontage unless the residential space were incorporated with commercial office space in the major structure. A typical program for the site under these conditions is shown below.

- Retail or university administrative functions (UC Garage space): 12,000 sq.ft.

- Commercial structure at corner of University and Walnut: 113,000 sq. ft.[5]

Option B - Demolition of UC Garage. This option would demolish the UC Garage and would remove the two wood frame residential structures and adjacent commercial structures. The removal of these structures would permit assemblage of the block into a single unit, thereby maximizing the development potential and providing opportunities for inclusion of housing. A joint development agreement between the university and adjoining private property owners would be needed. The illustrative program is shown below.



OPTION B

5 Would permit transfer of approximately 15,000 to 25,000 square feet of building space from garage site.

- Commercial structure at corner of University and Walnut — 124,000 sq. ft.
- Housing -- market rate with average gross floor space of 900 sq.ft. per unit: — 40 units

To make the residential portion of the project more affordable the Walnut Street right-of-way between Berkeley Way and University Avenue could be vacated and the street redesigned to provide parking for the housing units. Omitting the housing would increase the commercial space potential to 160,000 square feet.

COMPARISON OF OPTIONS. Each of the options assumes the university would lease the UC Garage site. In Option A the university could also sell the garage structure to a private investor. In either option the University could arrange for leaseback of portions of the commercial office space.

Economic Feasibility. Construction of the commercial office space included in Options A and B would constitute approximately 20 percent of the office space demand projected for the next 12 years. Prior analysis, summarized in Appendix B, indicates the projects would be financially feasible assuming a FAR of 5 and assemblage of land and inclusion of some parking. The latter would be difficult under Option A conditions due to constrained parcel dimensions. If ground level retail space is to be maintained along University Avenue and Oxford, parking would have to be underground or located off-site.

The economic feasibility of residential uses is highly questionable. Analysis reported in Appendix B concludes household income of $40,800 would be needed to purchase housing in a downtown complex. Moreover, prior market analysis indicates a downtown market for moderately priced units, rather than luxury units, is feasible. The problem of housing affordability could be offset by use of tax increment financing. This would require designation of the site as a redevelopment project and a finding of blight. The latter could be justified based on parcelization problems. The tax increments, that is, the increase in property revenues generated by new investment in the redevelopment project area, could then be used to subsidize housing.

Conversion and rehabilitation of the UC Garage for university purposes is also feasible, since this would be less costly in the long term than leasing the same amount of space in a newly constructed, privately owned office building. However, demolition of the garage would eliminate constricting parcel dimensions and permit greater design flexibility; thus enhancing overall economic feasibility and financial return of a development project at this site.

Revenue Potential. In Option A, the university would have the revenue potential generated by the ground lease of 14,500 square feet based on a potential of 12,000 square feet of retail or other commercial space on-site and the sale of the garage structure. This would be augumented by the potential sale of development rights for up to 25,000 square feet of space. Revenue benefits to the city and other taxing agencies under Option A would consist of the possessory interest in land on the garage site assuming a long term ground lease, the value of the garage structure, and the value of the 25,000 square feet of space transferred from the university land to the adjoining parcels. Loss of revenue to the university and city produced by Option A preservation efforts, as compared to Option B, would be minor. The differential in development level, assuming successful sale of development rights, would be approximately 23,000 square feet.

Consistency with Program Objectives and Guidelines. Option A would maximize historic preservation objectives

while Option B has major conflicts with this aim. In contrast, Option B provides better opportunities for achieving the objectives of expanding housing in downtown. Analysis presented in Appendix B, however, indicates the housing would need to be priced for upper middle income households with incomes in excess of $40,000 if housing subsidies are not available. Both options can be designed to conform to the land use, transportation, and urban design recommendations of this report.

UNIVERSITY HALL SITE

SITE CHARACTERISTICS. University Hall occupies a site of approximately 1.2 acres. The University Hall structure consists of a seven story tower and a three level structure adjoining the tower on the west. There is a total of 96,200 square feet of assignable space in the buildings.

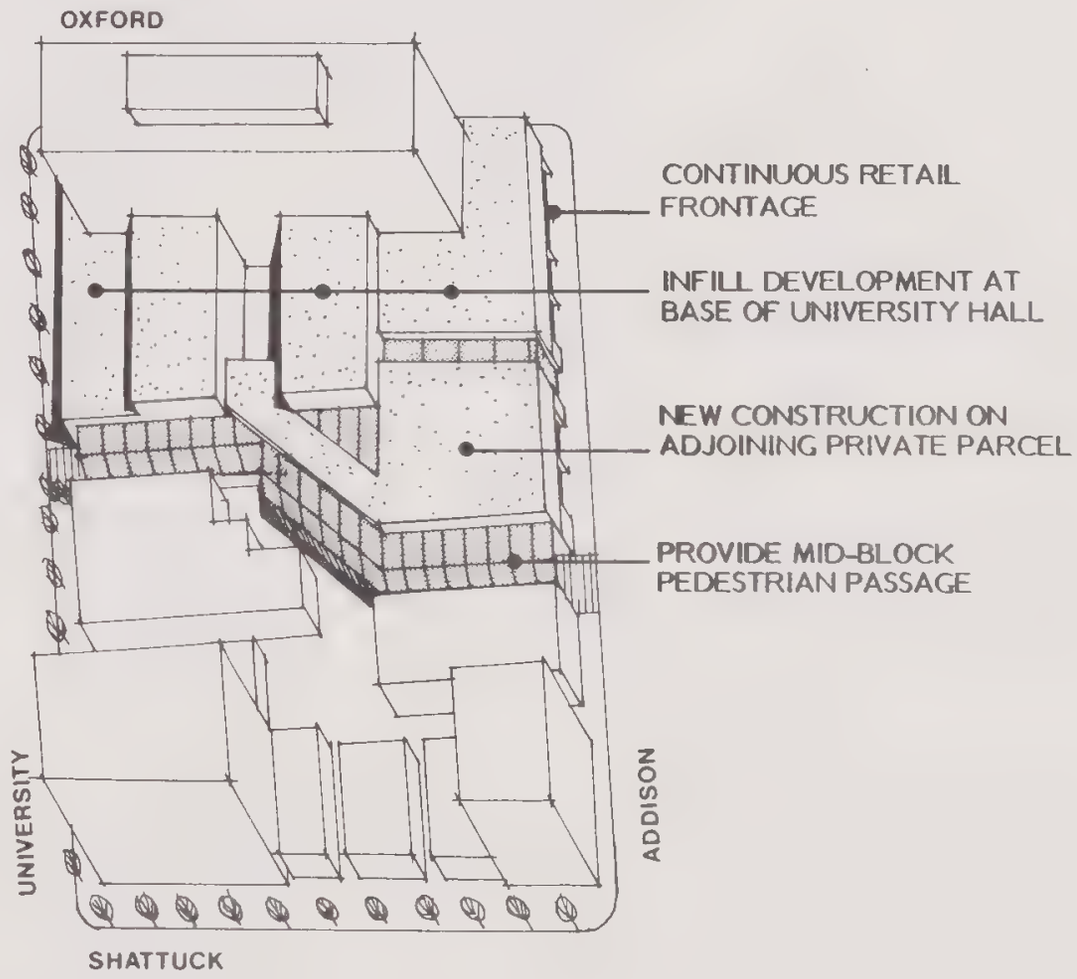
DEVELOPMENT OPTIONS. A key choice facing the university is whether to use the site more efficiently. At present both the frontage along University Avenue and Addison Street are undeveloped with the Addison area used for an open, below grade parking lot. Opportunities exist to fill in these areas thereby creating additional building space and eliminating the break in the building street facades which detracts from both the function and appearance of University Avenue and Addison Street.

Building space on site can be expanded in a number of ways including: (1) replacing the 18 space parking well with a two story structure; (2) adding office space to the roof of the lower building; and (3) filling in the building setback area with lower structures. Up to 37,000 square feet of space could be added under these development options. The additional space could be used for either university administrative functions or commercial uses. Inclusion of retail space along both the Addison and University Avenue frontages is recommended.

To facilitate expansion the university should consider sale of the University Hall structure to a private developer who would undertake the building expansion program. Under this approach the university would also grant a ground lease to the developer and provide for leaseback of space needed for university purposes.

COMPARISON OF OPTIONS.

Economic Feasibility. Because of the need to adapt new space to the existing site and building conditions, a higher than normal construction cost can be expected. This



University Hall

difference could be offset by a reduction in the university's ground lease provisions if necessary to ensure project feasibility. Small floor sizes could limit the marketability of the space if the major demand for new private office space is for buildings with 10,000 to 15,000 square feet of space per floor. This difficulty could be offset by transferring university functions to the new spaces, thereby releasing larger floors for private users.

Revenue Potential. The university's revenue potential would consist of two sources: revenue from the ground lease and proceeds from the building sale. It is impossible to estimate these returns without a definite building program. The major advantage to the university is the ability to finance improvement and expansion of the existing building. Revenues would accrue to the city under the building sale and land lease conditions. The extent of these revenues will depend upon the amount of building space reserved for university use.

Consistency with Study Objectives and Guidelines. Expansion of the University Hall Building would be an important step in implementing the urban design objectives and would serve as a model and catalyst for the improvement of downtown's street frontages. It would also serve as a means of reducing need for university space elsewhere in the downtown and help to reduce the adverse tax affects on the city created by university ownership.

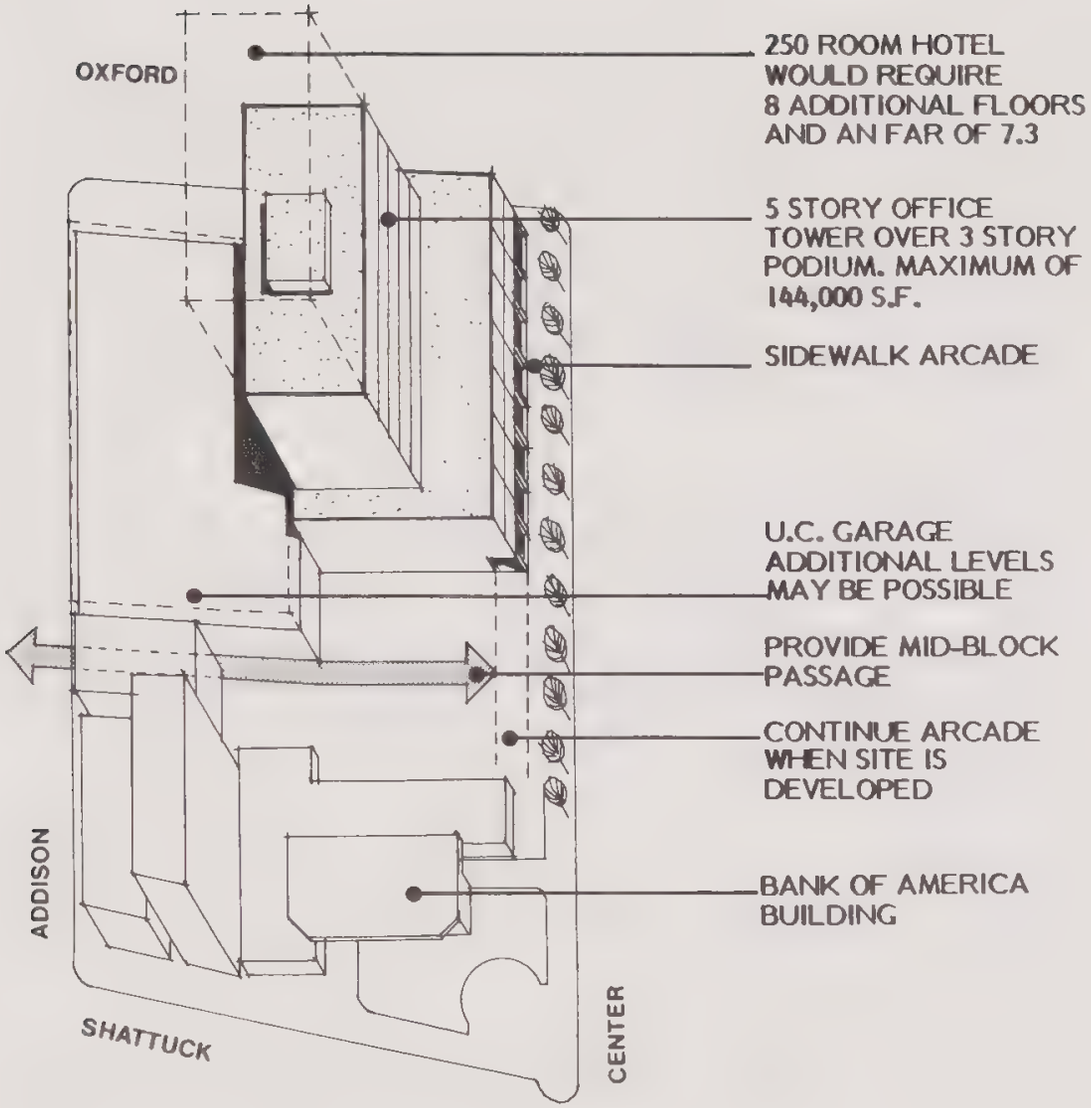
UC PRINTING DEPARTMENT

SITE CHARACTERISTICS. University-owned properties in this area consist of the UC parking structure and the UC Printing Department Building. The one story Bank of America building and three smaller commercial structures occupy the balance of the block. The total land area of the block is 110,000 square feet of which 59,000 square feet is university-owned. Retail, financial, and services occupy 22,500 square feet of the non-university-owned space. In addition, 52 apartment units incorporated in the upper floors of two structures supply residential housing. Three structures, the UC Printing Department Building and two buildings fronting on Shattuck Avenue, have been designated as potentially eligible for the National Register of Historic Places by BAHA. The major potential for reuse is created by the weak functional relationship of the UC Printing operation and campus functions and the opportunity for reuse of the building or the site, and the prime downtown commercial location. Due to the low level of utilization of the Bank of America property further intensification can also be expected on this site in the future.

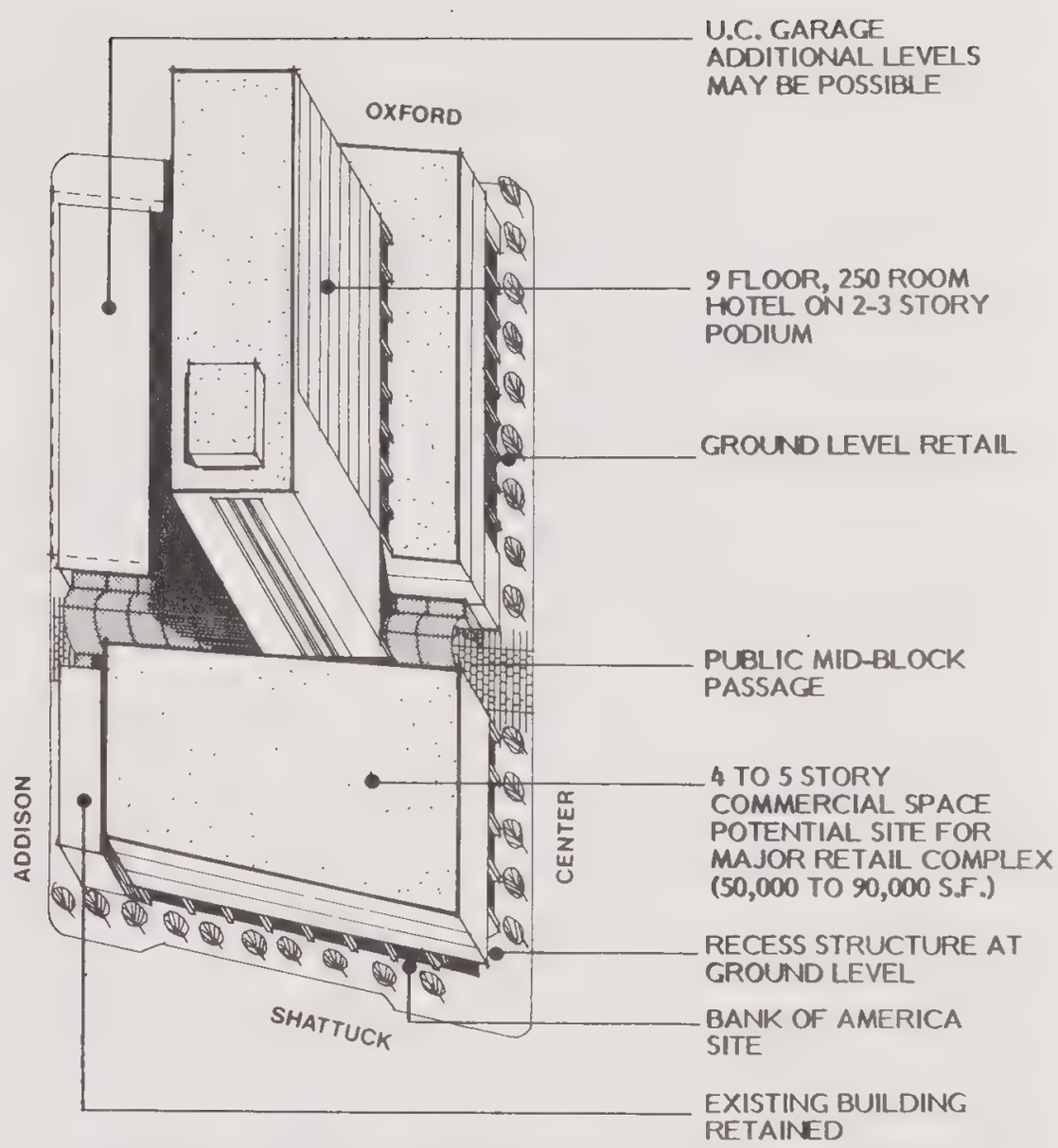
DEVELOPMENT OPTIONS. Two major options are described below. The first retains the existing Printing Department Building while the second removes it to permit more intensified development.

Option A - Retention of Printing Department Building. In this option the 34,700 square feet of assignable space in the Printing Department Building would be used for either university functions or commercial uses. In the latter uses, the building could be sold and the land leased to a private investor. In the first use, new university functions could consist of either administrative office, museum facilities or other highly community oriented university functions. Because of Center Street's importance as the primary pedestrian connection between downtown and the campus, inclusion of retail space, or at least pedestrian oriented displays, are recommended along the Center Street frontage. In the event retail space is included, the university should consider sale of the building and leasing back of space to be occupied by the university.

Option B - Demolition of Printing Department Building. In this option the existing Printing Department Building would be demolished to permit construction of ground level retail space and upper floor office space. The site



OPTION B (without reconstruction of Bank of America property)



OPTION B (with reconstructed Bank of America site)

can support 96,000 to 144,000 square feet of commercial space assuming a FAR of 4 to 6.

Because of the proximity to campus, downtown, and regional transit service, this site is also a potential location for a 250-room hotel and conference facility. Construction of the hotel would necessitate a building slab of approximately 150 feet in height and a FAR in excess of 7.0 if development is limited to the university-owned property. For these reasons a hotel use is not recommended. However, if the parcel can be assembled with the Bank of America property to the south better design would be possible, the height could be decreased, and economic feasibility increased. Joint development of the univeristy and Bank of America properties would also permit construction of a major retail complex which would be an ideal use for these centrally located properties.

Expansion of the adjoining UC parking structure should also be considered in conjunction with development of the Printing Department site. The structure had been designed to accommodate two additional levels of parking. However, building code changes since construction have added more demanding structural requirements. Therefore, detailed structural investigation will be needed to determine if expansion is possible. If expansion is found to be feasible the university should consider selling the structure to a private investor and leasing back space needed to accommodate university parking needs and the relocation of the UC Garage. This would provide tax advantages to the private investor and resolve university problems of expanding parking due to periodic limitations on bonding capacity.

COMPARISON OF OPTIONS. Either of the options presented offers substantial advantages to both the university and the city. A major determinant will be the strength of the private office market. If weak, the university could land-bank the site by retaining university functions until such time as there is sufficient market to justify intensification.

Economic Feasibility. The University Printing Department occupies a prime downtown commercial location and is a larger than normal site in the downtown.

Because of these characteristics, it has economic advantages over the previously discussed UC Garage site. Construction of commercial space at a FAR of 4 to 6 has been found to be feasible under current market conditions. One aspect, lack of parking downtown, however, could adversely affect marketability. This problem could be offset by developer participation in construction of additional parking in either the adjoining UC parking structure or the parking structure proposed beneath the Crescent.

Retention of the Printing Department Building and reuse for university functions is also economically viable. Calculations of rehabilitation cost indicate this action would be less costly than leasing private space in downtown.

As indicated in the description of options, a hotel would be economically feasible but expansion of the site to include all or a portion of the Bank of America property is desirable.

Revenue Potential. Assuming sufficient market demand, Option B offers the greatest potential revenue return to both the university and city. The university would receive ground lease returns based on development of 96,000 to 144,000 square feet of commercial space. The city would receive property tax returns on the possessory interest of the ground lease and $8 to 12 million of building improvements. Additional tax revenues would also be created if the university elected to sell the UC parking structure. The amount of tax revenue would be limited to the portion of the structure not committed to university use.

Consistency with Program Objectives and Guidelines. Both options would be highly supportive of the objectives and consistent with the guidelines. The potential conflict with the historic preservation objective could be partially offset by removal and reuse of the major design feature of the Printing Building--the Art Deco spiral stairway.

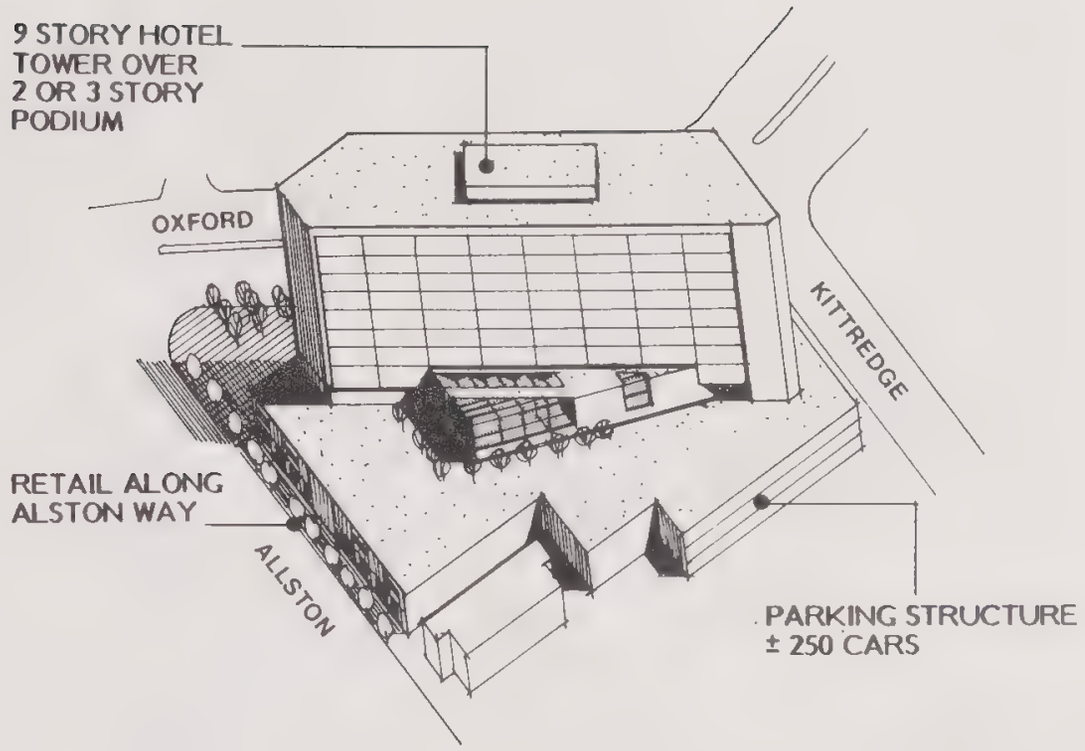
CITY OF BERKELEY PARKING LOT

SITE CHARACTERISTICS. The City of Berkeley parking lot on Oxford Street occupies a site of approximately one acre. Metered parking spaces are provided for 132 cars.

DEVELOPMENT OPTIONS. The site's proximity to the core of the downtown and the campus make it a prime site for commercial uses. Its commercial value is further increased by the size of the parcel which permits construction of larger commercial complexes than are feasible in most portions of downtown. The two prime potential uses for the site are either a hotel/conference complex or commercial offices. The site also has potential for accommodating a major retail complex. Its location within a half block of Hink's and Penny's provides an opportunity to develop a strong retail corridor along Allston Way.

Housing is viable only if the city is interested in promoting high cost housing in downtown or subsidies are available to offset the added cost of replacing existing parking in a parking structure and providing a resident-serving parking structure. The hotel/conference, commercial office, and retail options are described below.

Option A - Hotel/Conference Complex. Prior studies of the potential for hotel development in downtown Berkeley concluded a hotel with at least 250 sleeping rooms and 9,000 square feet of conference space is feasible. This building program plus 15,000 to 20,000 square feet of retail and other commercial space, replacement parking for existing public parking spaces, and construction of approximately 150 additional parking spaces to serve the hotel and conference complex can readily be accommodated on the site. The total floor space of hotel, conference, and supporting commercial use would range from 125,000 to 135,000 square feet. This is equivalent to a FAR of 3. Consideration should be given to accommodating additional commercial office space to enhance project feasibility.



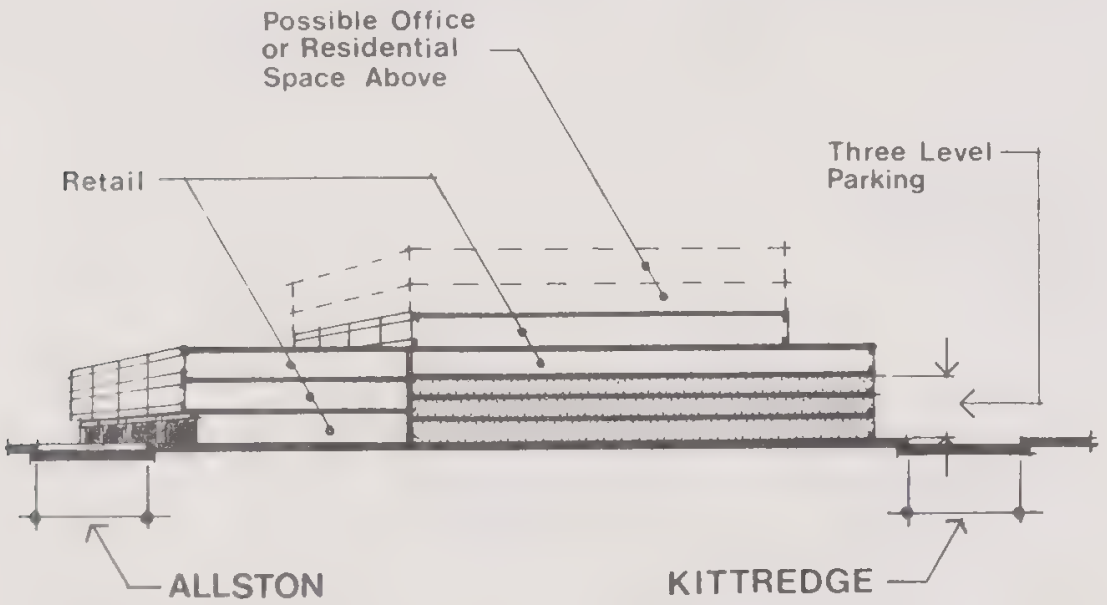
OPTION A

Option B - Commercial Office Development. Construction of 170,000 to 217,000 square feet of commercial space is possible on site. Construction should include replacement for 132 public parking spaces, and though current city regulations do not require parking for private office space, additional allowance for approximately 50 to 60 more spaces. The frontage along Allston Way should incorporate retail space at ground level.

Option C - Retail Complex. A retail complex incorporating 80,000 to 100,000 square feet of space and parking for 210 to 250 parking spaces, including replacement parking, can be accommodated on the site. This would require construction of a three level parking structure above grade since the market rents for retail space would not support the added construction cost of underground parking. This poses a design problem since the major retail space would be located on top of the three level parking structure at a height of approximately 26 feet. A

highly visible and easily accessible pedestrian connection with Allston Way would be required. This could be achieved by provision of a narrow retail space along Allston Way and a large entrance plaza or lobby with escalators, stairs and elevators. Acquisition of two to three of the adjoining parcels along Allston Way would improve the design and project feasibility and help strengthen the retail connection to Hink's and Penny's.

As shown in the accompanying figure it would be possible to include office space above the retail area if no additional parking is provided for the office area.



OPTION C Section

Economic Feasiblity. Market support is sufficient to justify all three options. Of the three, however, commercial office uses has a higher feasibility since offices leases can support greater construction cost than hotel or retail use and parking requirements are less demanding and less critical than for the retail or hotel use.

COMPARISON OF OPTIONS. Due to the larger site size, construction of the hotel/conference complex would be more feasible at this site than at the alternative University Printing Department site. In each instance granting of a ground lease by the city at no cost has been assumed to enable the construction of replacement parking in structure. Without this provision it is unlikely that any of three options would be economically feasible under current and projected market conditions.

Revenue Potential. The city's revenue potential is limited to property taxes, sales taxes, and room taxes. If developed to the intensities indicated in the option descriptions, the office option would provide a tax base increase of approximately $22,000,000, the hotel option $16,000,000, and the retail option $12,000,000. The ground lease, however, should be structured to provide for sharing in developer profit or sales receipts in excess of those needed by the investor for an economically feasible project.

Consistency with Study Objectives and Guidelines. All three options would help promote identified land use and urban design objectives. In each option, however, there is a potential for removal of two adjoining structures which have been identified by BAHA as potentially eligible for the National Register of Historic Places. One, on Kittridge, is a two story wood frame structure which could be moved if a replacement site can be found. The other is a small two-story brick building. Removal of either of these buildings would provide greater design flexibility and better utilization of the city-owned site.

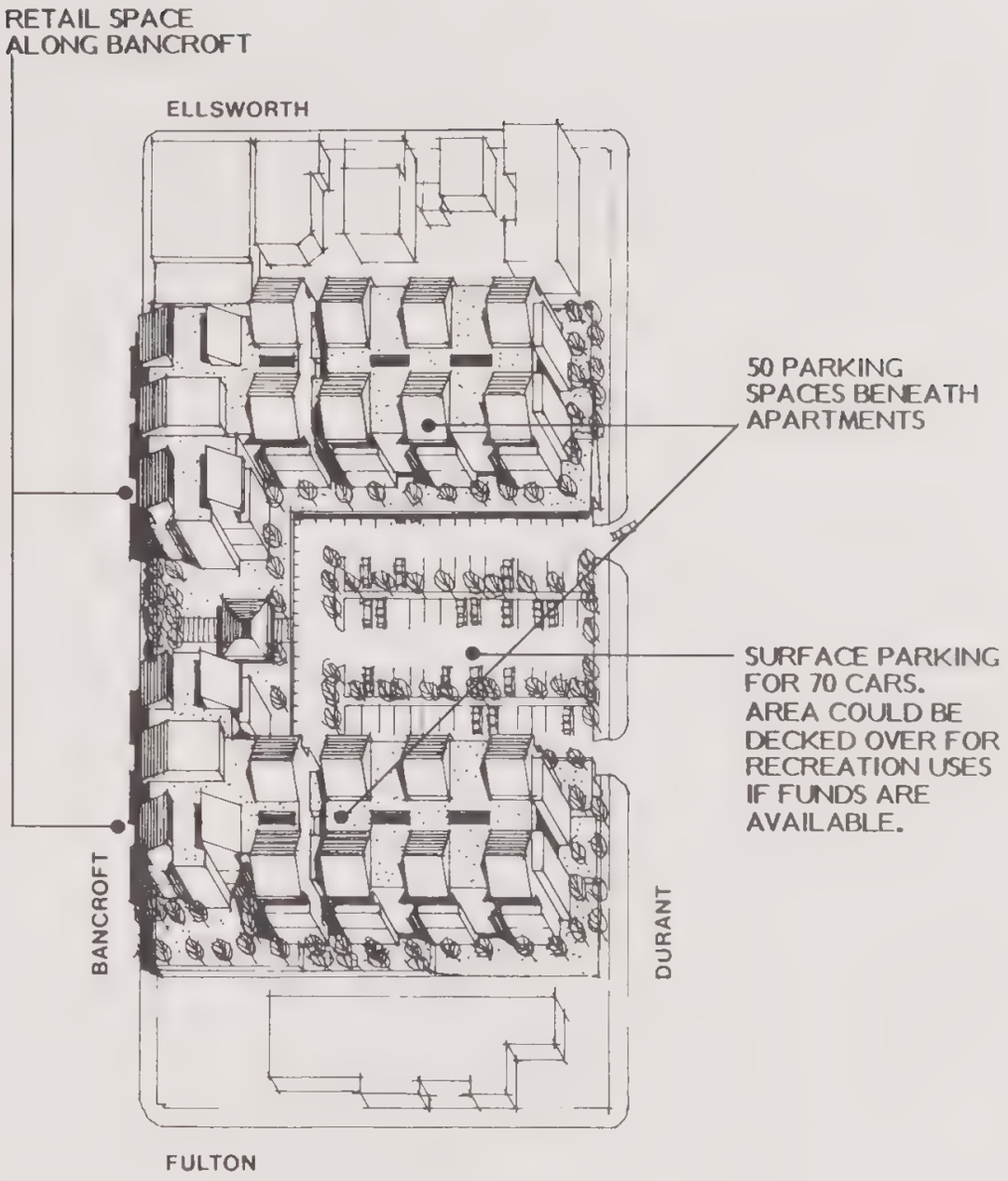
BANCROFT LOT

SITE CHARACTERISTICS. The university-owned 2.8 acre Bancroft lot between Fulton and Ellsworth occupies most of the city block. The current use is parking for UC staff (206 spaces), a small structure recently renovated as office space and currently used by Telecommunications, and recreational facilities including two tennis courts, a basketball court, two volleyball courts, and a putting green.

The site slopes gently on an east-west gradient with an overall change in elevation of about 15 feet in 400 feet or a slope of less than 4 percent. To the south and east is residential development consisting primarily of two story flats; to the north is the wall surrounding Edwards Fields. To the west is a one story bank building with parking below grade.

DEVELOPMENT OPTIONS. Three development options have been evaluated for the site: student housing, research-related commercial development, and university research or teaching space. In addition, the site has been identified as a potential parking reservoir, and the feasibility of including parking at this site has been evaluated. Finally, the recommended urban design guidelines provide for a ground floor retail frontage to be integrated into the base of the development along Bancroft Way. The feasibility of this portion of the program is also evaluated.

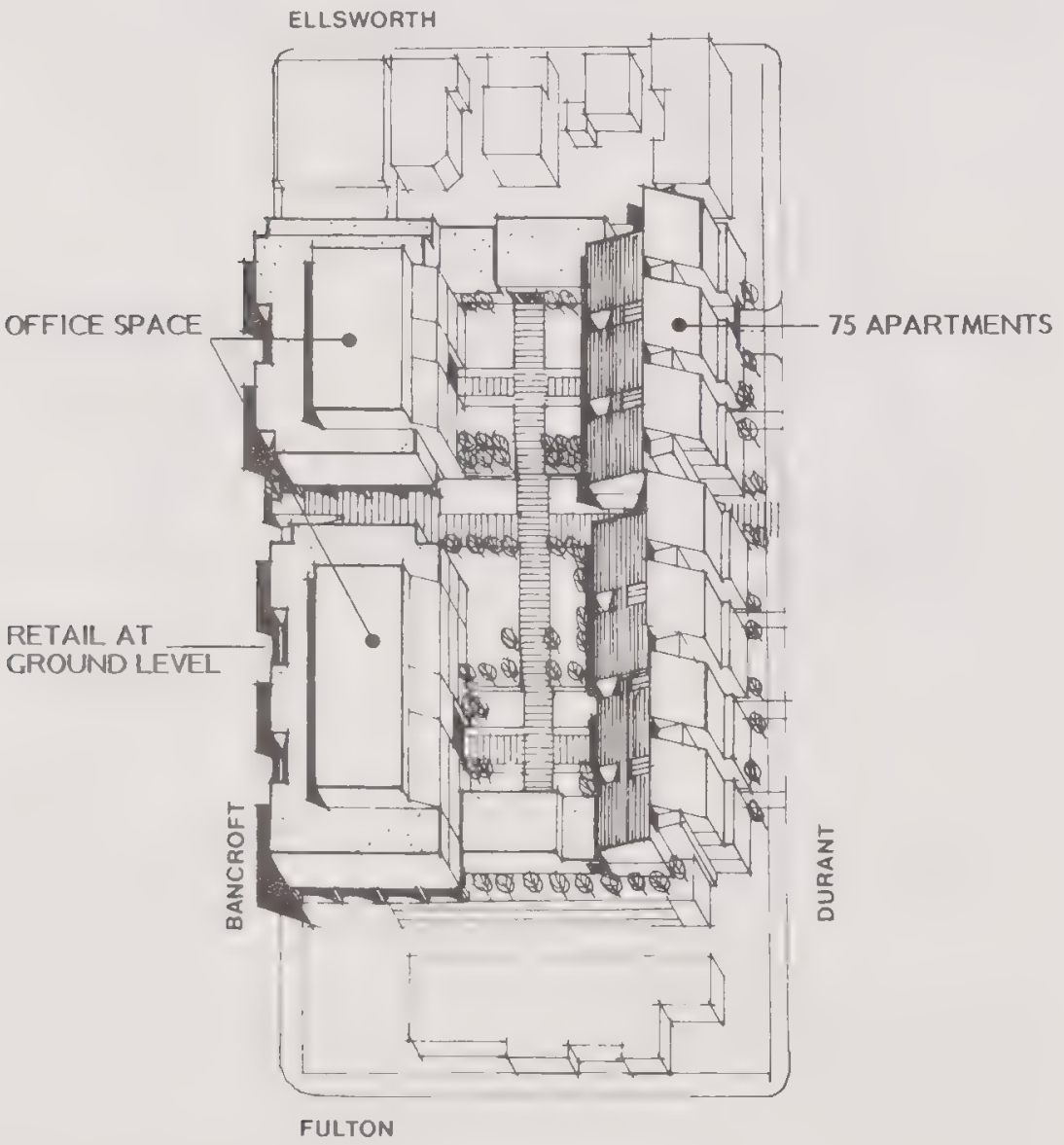
Option A - Student Housing. In this option the entire 2.8 acre lot is developed. The program includes 115 student apartments (940 square feet two bedroom units with four beds). The development also includes 20,000 square feet of ground floor retail space fronting on Bancroft and covered parking for 50 cars with another 70 cars in surface parking. Revenue generated by the retail space could be used to subsidize student housing.



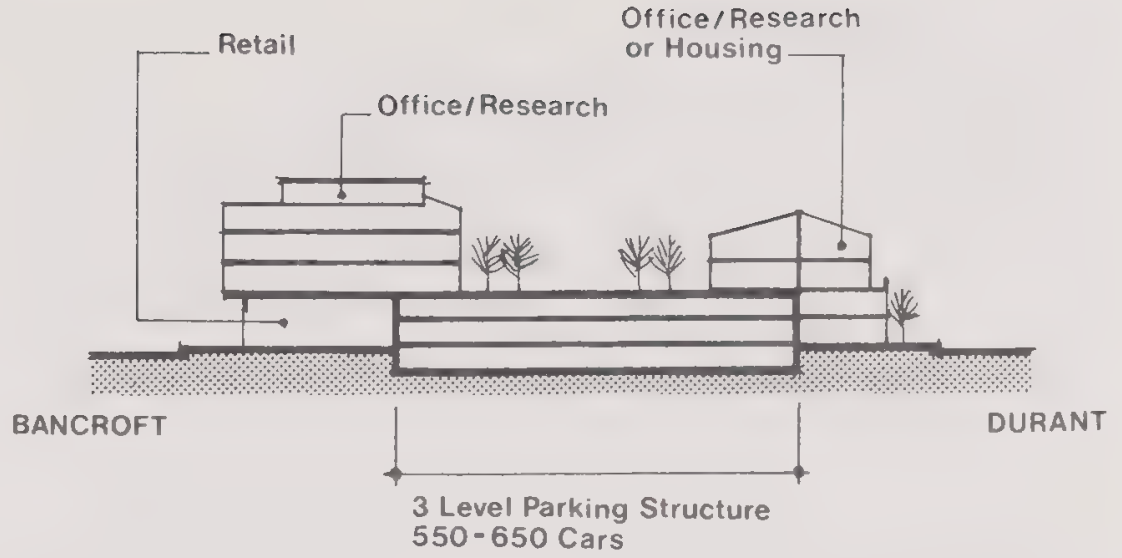
OPTION A

The development arrangement assumes private development and management on land leased on a long-term basis from the university at no cost. This arrangement (similar to the Oxford Tract student housing option) passes through tax deductions from depreciation to private investors and generates private equity investment for the development.

Option B - Research-Related Commercial Development. In this option the entire 2.8 acre site would be made available for development to attract a research related commercial development. The size of the parcel and its location make it as attractive a site for this development as the Oxford Tract.



OPTION B (with housing)



OPTION B Section

Development of the entire site for research/office space, however, may not be feasible unless the site were able to attract development in excess of that projected through 1995. As shown in the accompanying diagram, it would be possible instead to incorporate approximately 75 student housing units along the Durant frontage.

Option C - University Research or Teaching. This 2.8 acre site is convenient to the perimeter of the main campus and a substantial land resource that is larger than any potential building site in the west side area of the main campus.

COMPARISON OF OPTIONS. Each of the options assumes a more intensive use of the land. None of them requires any additional assembly. The displaced parking of 206 spaces would have to be accommodated either on-site or elsewhere in the area.

Economic Feasibility. Two factors unique to development of student housing make it financially infeasible for a private developer without substantial subsidy. The high

assumed debt cover ratio[6] and the low rent level relative to development costs[7] produce an unusually large equity requirement of almost $4.5 million (43 percent of total development cost) and reduce projected returns over a 10-year period.

In addition to provision of land at no cost, use of private equity capital would require additional subsidy from the university. To attract private investment and allow for an attractive after-tax return over 10 years,[8] rents need the capacity to increase up to 7 percent per year. A 7 percent annual increase may exceed university affordability criteria for student housing rents. If so, the university could subsidize rents according to conditions and procedures set forth in the ground lease. For example, if the university allowed rents in this development to increase 2 percent per year, and the development required a 7 percent per year increase, the university's subsidy of the cash difference between increases at 7 percent and 2 percent over 10 years would total approximately $1.6 million (net present value at a 10 percent discount rate). This $1.6 million subsidy is still less than half of the $4.5 million in private equity generated by private development and management. The actual subsidy could total considerably less than $1.6 million since student rents could increase more than 2 percent per year, and the development might not require a full 7 percent increase each year, if expenses do not increase as rapidly as expected. However, the full $1.6 million would need to be invested and reserved for the development to provide security for the developer and the bond issue.

Avenues for reducing the amount of subsidy are the same as those identified in the Oxford Tract student housing option discussion: reduction in the size of the units, charging student fees for parking, and reduction in the overall parking program. Additionally, the university may absorb management costs of the project or provide guarantees to the lending institution to reduce the assured debt coverage ratio required. In these cases, the subsidy remains though is provided in a different form.

Burdening this project with the additional cost of providing replacement parking for 206 cars makes this option even less financially feasible, unless the parking could generate revenue in excess of $98 per month per stall. This assumes construction costs averaging $25 per square foot and no land cost. This level of revenue would only be possible with short-term parking which could charge a higher rate than long-term parking. (See Appendix B.)

The student housing option could be feasible for the private developer if the university is willing to alter the program or find some way to directly subsidize the project, as outlined above. However, the terms of a subsidy agreement between the university and the private owner would need to be carefully structured to reward good design and management and protect the university in the unlikely event the owner abandons the property. Terms which would protect the university and still attract a private owner/manager could be extremely difficult to

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6 Financing terms for the pro forma assume a debt coverage ratio of 1.35. A debt coverage ratio of approximately 1.35, but not lower than 1.25, is anticipated to be required by the financial institution issuing the bond. This is also specified in the university's current bond indenture for student housing. A lower ratio would be possible only if the university guaranteed the loan.

7 As shown in Appendix B, rent affordability is assumed at $175 per month per student or $700 per unit per month, as reported by the Berkeley Campus Housing Office.

8 Appendix B shows an annual after-tax internal rate of return on equity, given sale after 10 years, of 17 percent.

negotiate, since the developer would be required to submit to a form of rent control. Thorough evaluation of the actual practicality of this concept is important, but beyond the scope of this study.

The Bancroft lot is a prime location for commercial office use. Because of the prime location and high land values associated with that development, the university could negotiate with a developer to reduce ground lease payments in return for construction of on-site parking to replace parking lost due to the construction. To produce replacement parking spaces in an on-site parking structure (below the office space) the university would need to forego at least $5,500 in capitalized value for each parking space.[9]

Although design and access considerations could limit the number of on-site parking spaces, the university could trade the parking land free of charge for on-site replacement parking. In trade, a developer could construct approximately 570 university parking spaces, although aesthetic and access issues would affect the design for these many spaces.

The mixed use option described would generate less potential lease income than a single use office development. Initial analysis indicates, however, that the university could be provided with the 206 replacement parking places on-site, plus 70 parking places in the form of a subsidy to the housing portion of the project, and still retain a residual lease income. The precise form of the agreement, the amount of parking required by the city to support office use, and the amount of office space provided in the project will all affect the financial feasibility.

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[9] Assumes construction costs of $5,500 per space and land values at $30 per square foot.

In negotiating the terms of a ground lease, the university might also reap some of the tax benefits to the developer of owning a public parking structure. The university might negotiate to capture half of the depreciation as a potential ground lease income.

The economic feasibility of an academic structure on the Bancroft lot are the same as on the Oxford Tract.

Revenue Potential. There is no revenue potential in Option A, the student housing program. The revenue potential for Option B, the commercial office project, depends on the amount of parking provided by the developer and the potential to capture some of the private ownership of the improvements on the site. It could be as low as zero with 570 free parking places or as high as $315,000 annually and no parking places (assuming a land value of $30 per square foot and a land lease at 10 percent of the land value). There is no revenue potential from Option C, the academic or teaching function.

Revenue to the city on Options A and B is in the form of taxes on the value of the individual projects. For the student housing option it would be on the capital investment of approximately $7.0 million. On the commercial office option, city revenue from property tax on the land improvements would likely be calculated on the capital investment between $24 million to $36 million depending on the size of the project and the construction costs. In addition, the possessory interest in the land in a long term lease may be as much as $3.6 million for the entire 2.8 acre site valued at $30 per square foot. Finally, there will be sales tax revenue to the city on gross sales revenue of about $360,000 in the first year.

Consistency with Study Objectives and Guidelines. Options A and B both conform to the objectives identified in the Study. Option C, the academic use, has the effect of extending the primary academic function further off the main campus and keeps the property and its improvements off the tax roles.

APPENDIX A: COMPARISON OF TRANSPORTATION OPTIONS

Prepared by PRC Voorhees

COMPARISON OF TRANSPORTATION OPTIONS: WEST SIDE STUDY

Two options for changes in the circulation system in downtown Berkeley have been considered during the assessment phase of the West Side Study. Briefly summarizing, those options include:

Option A:

- Shattuck Avenue, between Center Street and University Avenue, would be returned to two-way traffic flow,
- Center Street, between Shattuck Avenue and Oxford Street, and Shattuck Square, between Center and University Avenue, would be open to transit vehicles only.

Option B:

- Shattuck Avenue would be returned to two-way traffic flow (as in Option A),
- Center Street and Shattuck Square would be reserved for transit vehicles only (As in Option A),
- Through traffic on Oxford Street, between University Avenue and Bancroft Way, would be eliminated.

The impacts of these two transportation options were analyzed by first considering how existing traffic flows would shift, upon their implementation, and then second by adding the additional traffic which would be generated by the new intensified land uses projected for downtown Berkeley in 1995. The key intersection studied, was the Shattuck/University intersection because the major impacts associated with the transportation options would be most noticeable at that location.

OPTION A

Existing p.m. peak hour traffic volumes at several of the major intersections in downtown Berkeley are illustrated on Figure 1. The existing level of service at the Shattuck/University intersection (really two intersections) is at the border of levels D and E, indicating that it is currently operating near capacity.

Figure 2 illustrates the traffic volumes that could be anticipated following implementation of Transportation Option A. It represents the anticipated shift in existing traffic that would occur if Shattuck Avenue was returned to two-way traffic. Figure 3 illustrates the type of lane configuration (traffic flow pattern) that would occur under Option A. Parking would have to be prohibited on both sides of Shattuck Avenue, between Center Street and University Avenue, and the sidewalks would have to be modified near the intersections. Movements at the Center/Shattuck intersection would be simplified because of the elimination of through automobile traffic on Center Street.

The level of service that would result at the Shattuck/University intersection would be level C. With the proper signal modifications, the operating characteristics of the intersection would improve over existing conditions because of the elimination of the slow movement of northbound traffic from Shattuck Square onto University and then back onto Shattuck Avenue. The total volume of traffic through the Shattuck/University intersection would be about 2,715 vehicles in the p.m. peak hour, less than, but comparable to the 2990 vehicles currently using the Oxford/Hearst intersection in the p.m. peak hour.

Transportation Option A would improve the level of service at Shattuck/University to the point that it could accomodate additional vehicular traffic beyond current volumes.

Figure 1

EXISTING PM PEAK HOUR TRAFFIC VOLUMES

● = Signalized Intersections

SOURCE: PRC VOORHEES COUNTS, MAY, 1982

PRC Voorhees

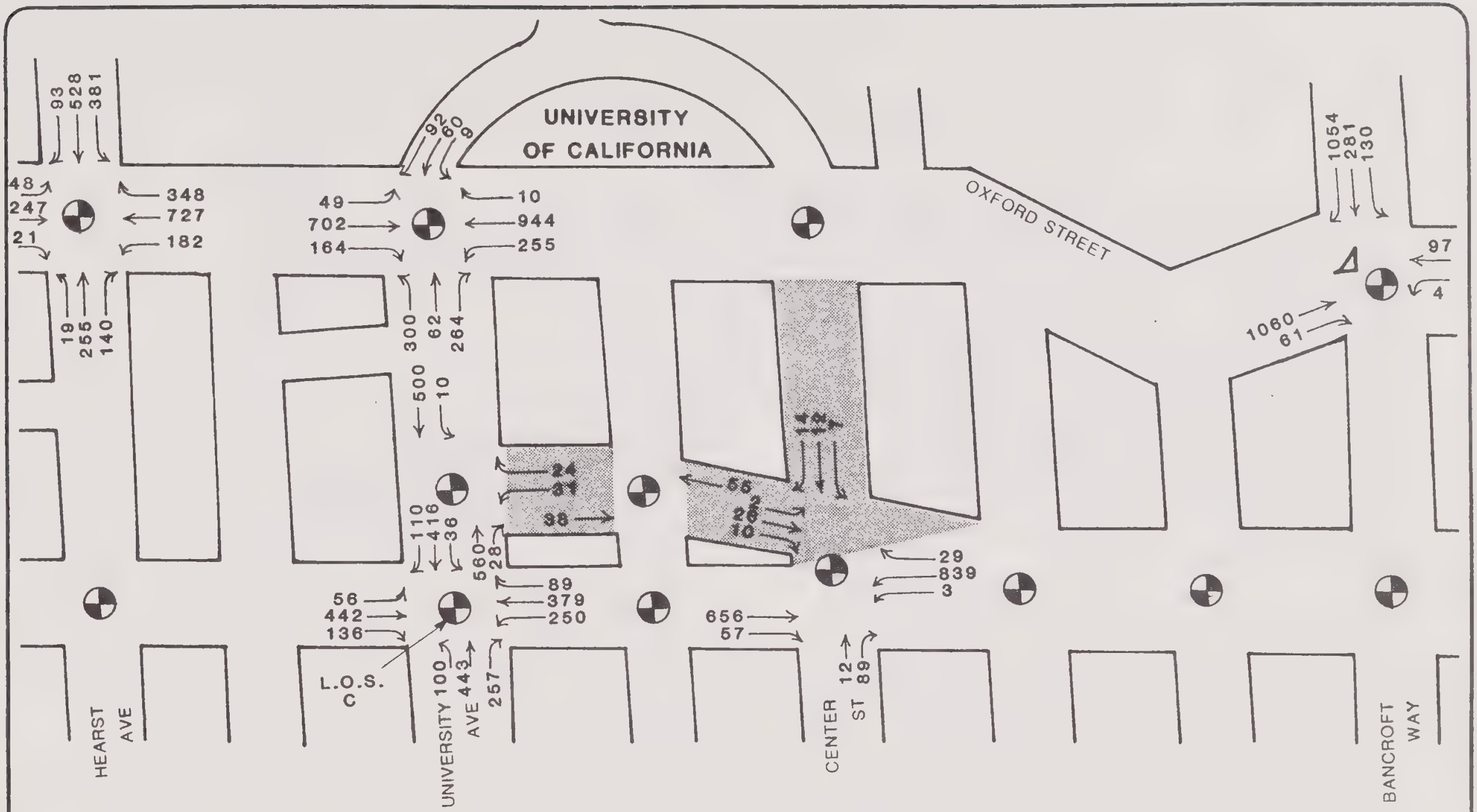


Figure 2
Transportation Option A
PM PEAK HOUR TRAFFIC FOLLOWING IMPLEMENTATION OF SHATTUCK SQUARE-CENTER STREET TRANSIT MALL*

Signalized Intersections

Roadways limited to transit vehicles only

* SHIFT IN EXISTING TRAFFIC ONLY

PRC Voorhees

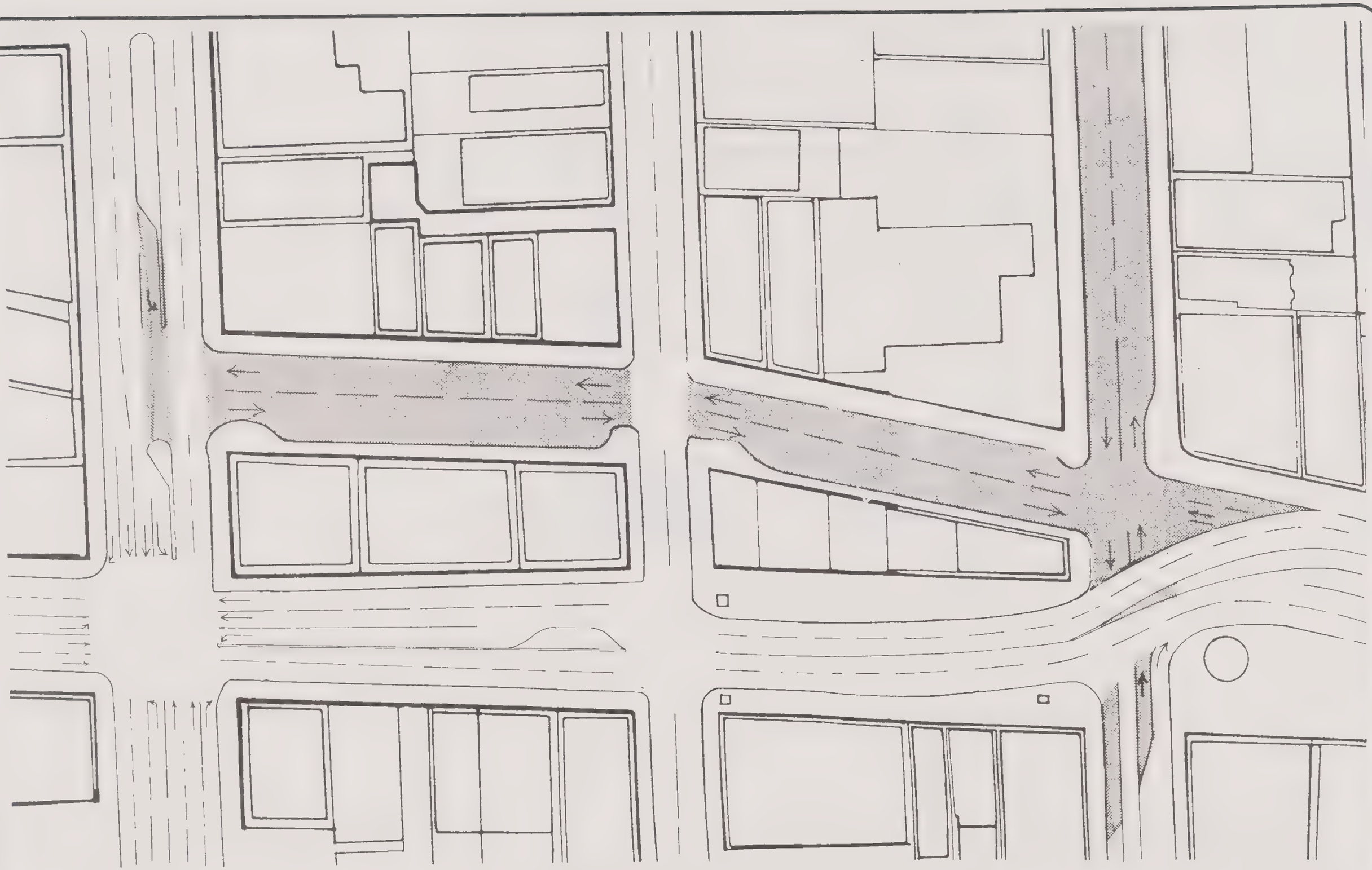


Figure 3
SHATTUCK AVE. LANE CONFIGURATION
FOR TRANSPORTATION OPTION A

Streets reserved for
transit vehicles only

Future Conditions: Two alternative land use scenarios were analyzed for the West Side Study area for 1995. Each involves adding approximately 100 market-rate housing units, a 250-room hotel and 340 student housing units.

Alternative 1 also includes 560,000 square feet of new office construction and the addition of 200,000 square feet retail space in downtown Berkeley. Alternative 2, assumes a more accelerated level of development, with 700,000 square feet of office and 250,000 square feet of retail space.

The peak hour generation, associated with each of these alternative land uses, is described in Tables 1 and 2. The trip generation estimates are based on mode splits (use of alternative forms of transportation) comparable to those currently being experienced in downtown Berkeley. Data collected for the Berkeley TRIPS project indicates that approximately one-third of all office workers in downtown Berkeley currently use transit to travel to/from work.

Continuation of current travel patterns would result in the addition of approximately 1,350 vehicles to the streets of Berkeley in the p.m. peak hour in 1995 under land use Alternative 1. Land use Alternative 2 would result in 20% more vehicles, approximately 1,650 in the p.m. peak hour. Increases in ridesharing and/or transit usage by office workers would, of course, reduce these estimates of future traffic.

The addition of this new traffic would result in the peak hour volumes illustrated in Figure 4. Total volume through the Shattuck/University intersection would increase to about 3,015 vehicles, approximately 11% over the shift in existing traffic. The resulting level of service would be on the border of levels C and D. Land use Alternative 2 would result in a total volume of approximately 4,000 vehicles through the Shattuck/University intersection, 13% over the shifted existing volumes. If the land uses included in Alternative 2 are implemented by 1995, the level of service at the Shattuck/University intersection would be level D.

OPTION B

The diversion of through traffic from Oxford Street would result in significantly higher traffic volumes on Shattuck Avenue than currently exist, or than would exist under Option A. Figure 5 illustrates the traffic volumes which would result following implementation of Transportation Option B. It was assumed that approximately 10% of the existing through traffic on Oxford Street would shift to Gayley Road and another 10% would shift to Grove and/or Milvia. The remaining 80% of the existing Oxford traffic was assumed to continue travelling through downtown Berkeley, primarily on Shattuck. Option B increases the projected volumes at the Shattuck/ University intersection to approximately 3,900 vehicles in the p.m. peak hour. The resulting level of service would be D/F -- the intersection would be operating at capacity.

Future Conditions. If Transportation Option B were implemented and the new land uses forecast for 1995 were developed, at least three potential changes in peoples' travel patterns would occur:

(1) Some of the existing and/or newly-generated traffic which would use Shattuck Avenue, if capacity were available, would shift to alternate north-south roadways, most likely Gayley Road and Grove Street.

(2) Some of the existing and/or new office workers in downtown Berkeley who might otherwise drive to work alone, would shift to transit or ridesharing, and

Table 1

TRIP GENERATION, BY MODE, OF NEW WEST SIDE LAND USES IN 1995

New Land Use Alternative[1]	Person Trips				Vehicle Trips[1]				P.M. Peak Hour Trips[2] Transit Trips				Walk/Bicycle Trips			
	Inbound (Rate)	No.	Outbound (Rate)	No.	Inbound (Rate)	No.	Outbound (Rate)	No.	Inbound (Rate)	No.	Outbound (Rate)	No.	Inbound (Rate)	No.	Outbound (Rate)	No.
Office: 560,000 SF	(0.43)	241	(2.19)	1,226	(0.24)	134	(1.23)	89	(0.14)	78	(0.72)	403	(0.01)	6	(0.07)	39
Retail: 200,000 SF	(1.5)	300	(1.57)	314	(0.87)	174	(0.91)	182	(0.15)	30	(0.16)	32	(0.30)	60	(0.31)	62
Hotel: 250 Rooms	(0.54)	135	(0.55)	138	(0.25)	62	(0.26)	65	(0.05)	12	(0.06)	15	(0.11)	28	(0.11)	28
Housing: 50 DU's Walnut St.	(0.45)	22	(0.22)	11	(0.29)	14	(0.14)	7	(0.09)	4	(0.04)	2	(0.02)	1	(0.01)	1
50 DU's Kittridge St.	(0.45)	22	(0.22)	11	(0.29)	14	(0.14)	7	(0.09)	4	(0.04)	2	(0.02)	1	(0.01)	1
Total New Trips	720		1,700		398		950		128		454		96		131	

1. Includes persons ridesharing.

2. Trip rates shown were based on the following mode splits applied to standard ITE trip generation rates:

	Auto Driver	Auto Passenger	Transit Rider	Walk/Bike
Office	56%	8%	33%	3%
Retail	58%	12%	10%	20%
Hotel	47%	23%	10%	20%
Housing	65%	10%	20%	5%

Table 2

TRIP GENERATION, BY MODE, OF NEW WEST SIDE LAND USES IN 1995

New Land Use Alternative 2	Person Trips				Vehicle Trips[1]				P.M. Peak Hour Trips[2] Transit Trips				Walk/Bicycle Trips			
	Inbound (Rate)	No.	Outbound (Rate)	No.	Inbound (Rate)	No.	Outbound (Rate)	No.	Inbound (Rate)	No.	Outbound (Rate)	No.	Inbound (Rate)	No.	Outbound (Rate)	No.
Office: 700,000 SF	(0.43)	301	(2.19)	1,533	(0.24)	168	(1.23)	861	(0.14)	98	(0.72)	504	(0.01)	7	(0.07)	49
Retail: 250,000 SF	(1.50)	375	(1.57)	392	(0.87)	218	(0.91)	228	(0.15)	38	(0.16)	40	(0.30)	75	(0.31)	78
Hotel: 250 Rooms	(0.54)	135	(0.55)	138	(0.25)	62	(0.26)	65	(0.05)	12	(0.06)	15	(0.11)	28	(0.11)	28
Housing:																
50 DU's Walnut St.	(0.45)	22	(0.22)	11	(0.29)	14	(0.14)	7	(0.09)	4	(0.04)	2	(0.02)	1	(0.01)	1
50 DU's Kittridge St.	(0.45)	22	(0.22)	11	(0.29)	14	(0.14)	7	(0.09)	4	(0.04)	2	(0.02)	1	(0.01)	1
Total New Trips	855		2,085		476		1,168		156		563		112		157	
% change from Alternative 1	+19%		+23%		+20%		+23%		+22%		+24%		+17%		+20%	

1. Includes persons ridesharing.

2. Trip rates shown were based on the following mode splits applied to standard ITE trip generation rates:

	Auto Driver	Auto Passenger	Transit Rider	Walk/Bike
Office	56%	8%	33%	3%
Retail	58%	12%	10%	20%
Hotel	47%	23%	10%	20%
Housing	65%	10%	20%	5%

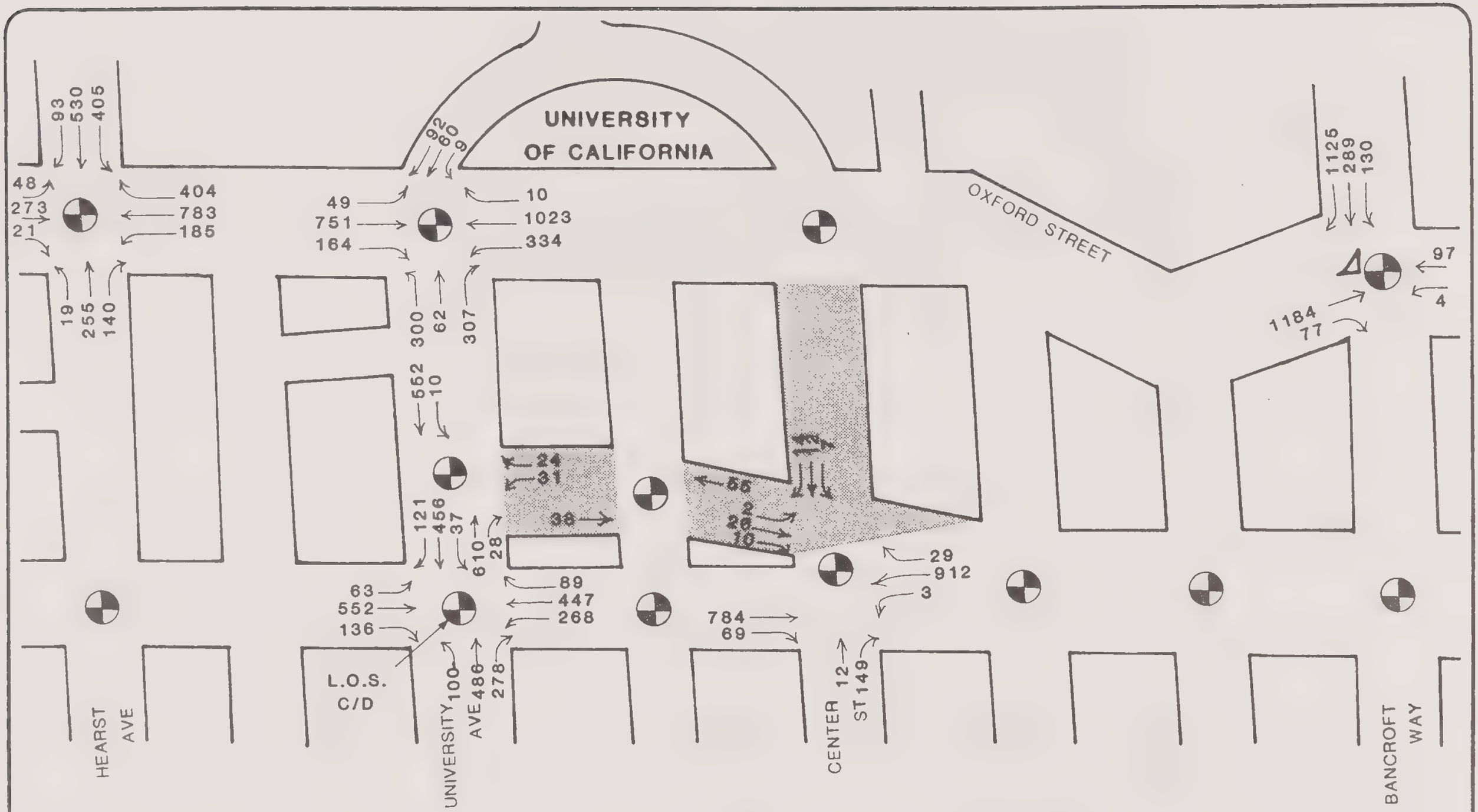


Figure 4

PM PEAK HOUR TRAFFIC 1995 LAND USE ALTERNATIVE 1
(Transportation Option A)

Roadways limited to transit vehicles only

Signalized intersections

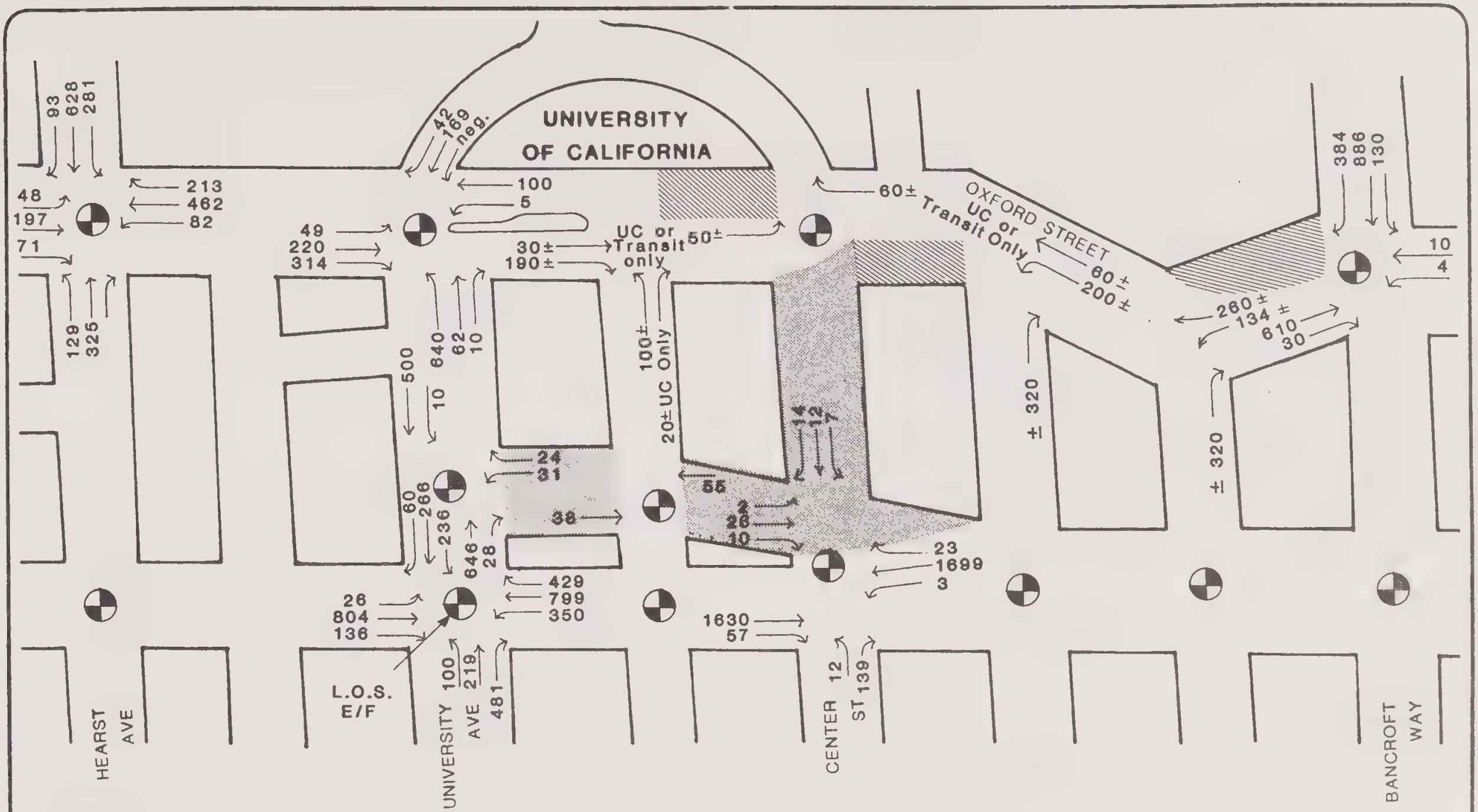


Figure 5
Transportation Option B
PM PEAK HOUR TRAFFIC FOLLOWING IMPLEMENTATION OF SHATTUCK SQUARE–CENTER STREET TRANSIT MALL AND OXFORD STREET CLOSURE TO THROUGH TRAFFIC *

* Shift in existing traffic only

Abandoned right-of-way to prevent through traffic

Roadways limited to transit vehicles only

Signalized intersection

(3) Some of the existing or new drivers who would like to travel to or from downtown Berkeley during the p.m. peak hour, would shift to alternative time periods.

As previously mentioned, the shift in existing volumes associated with Option B would result in operating conditions at the Shattuck/University intersection at the E/F level. This would mean that very few additional vehicles could be added to the intersection, and probably to the whole Shattuck corridor in downtown, under Option B.

An examination was given to the type of modal split that would probably have to occur to accomodate the additional person-trips into/out of Berkeley associated with the increased development anticipated in 1995. If it is assumed that under Option B, the total volume of traffic in downtown Berkeley cannot increase beyond current levels (because of capacity constraints) and that the amount of office space in downtown will approximately double, a significant shift away from single-occupant auto usage will have to occur. One scenario for how this could occur follows:

The existing modal split for office workers results in approximately 57 vehicles for every 100 employees:

Existing Modal Split		Number of Vehicles per 100 Employees
Drive Alone	- 56%	56 vehicles
Rideshare	- 8%	3 vehicles
	Subtotal	57 vehicles
BART	- 22%	22 persons
AC Transit	- 11%	11 persons
Bicycle	- 2%	2 persons
Walk	- 1%	1 person

An example of a modal split goal which would accomodate a doubling in total office employees, without increasing total traffic is:

Modal Split Goal		Number of Vehicles per 100 Employees
Drive Alone	- 20%	20 vehicles
Rideshare	- 22%	8 vehicles
	Subtotal	28 vehicles
Transit	- 50%	50 persons
Bicycle/Walk	- 8%	8 persons
		58 persons

not in cars

If such a modal split could be obtained, the downtown Berkeley street network could accomodate the increased development levels under Transportation Option B. Anything between this modal split goal and the existing modal split would result in increased congestion and/or shifts in traffic to alternate routes or time periods.

The capacity of the BART system to handle the increased passenger loads associated with the above modal split goal was briefly reviewed:

- BART currently runs 9 peak hour trains through Berkeley (five 5-car trains, two 6-car trains and two 4-car trains)
- Peak hour ridership at Berkeley Station is 2,762 persons, of which approximately 1,250 are work-related trips
- If the total square footage of office space doubles, and BART's percentage modal split

increases form 20% to 39%, then the number of peak hour, work-related BART trips in Berkeley would increase by 3.5 times to approximately 4,375 passengers

- Total peak hour BART ridership in Berkeley would increase to approximately 5,890 passengers, equivalent to between 600 and 700 passengers per train, with 9 trains per hour

- This would require that BART increase the number of train cars assigned to the Richmond and Fremont lines, through Berkeley, to provide an average of nine 7-car trains during the peak hour.

CONCLUSION

Table 3 provides a summary of the levels of service that can be expected at the Shattuck/University intersection under the various scenarios considered.

Transportation Option A will improve the flow of traffic through downtown Berkeley and provide additional capacity to accomodate traffic generated by new land uses in the downtown area.

Transportation Option B will result in capacity conditions along Shattuck Avenue and will discourage any additional motorists from trying to use the Shattuck Avenue Corridor during peak hours. Travel demands generated by new land uses will increasingly havecenarios considered.

Both transportation options will serve to encourage transit ridership by creating a "transit mall" in downtown Berkeley. Option B will go further to encourage transit usage than Option A, primarily because traffic congestion will provide a greater disincentive to auto usage under Option B.

Table 3

P.M. PEAK HOUR LEVEL OF SERVICE
Shattuck/University Intersection

EXISTING CONDITIONS	L.O.S. = D/E		V/C = 0.90	
	Transportation Option A		Transportation Option B	
Shifted Existing Volumes	C	(0.75)	E/F	(1.00)
1995 Land Use Alternative 1	C/D	(0.81)	E/F	(1.00)
1995 Land Use Alternative 2	D	(0.83)	E/F	(1.00)

Alternative #1:	560,000 sq. ft. office 200,000 sq. ft. retail	+	100 market rate residential units
Alternative #2	700,000 sq. ft. office 250,000 sq. ft. retail	+	250 room hotel 340 student housing units

FOOTNOTES

[1] Level of Service at an intersection is a measure of the amount of congestion/delay experienced by vehicles passing through the intersection. It varies from Level A, where conditions are free flowing and drivers experience minimal delays, to Level F, where the intersection becomes jammed and delays are considerable. Level of Service D is representative of peak hour conditions in many urban areas, where drivers on some approaches have to wait through more than one red cycle before proceeding through the intersection.

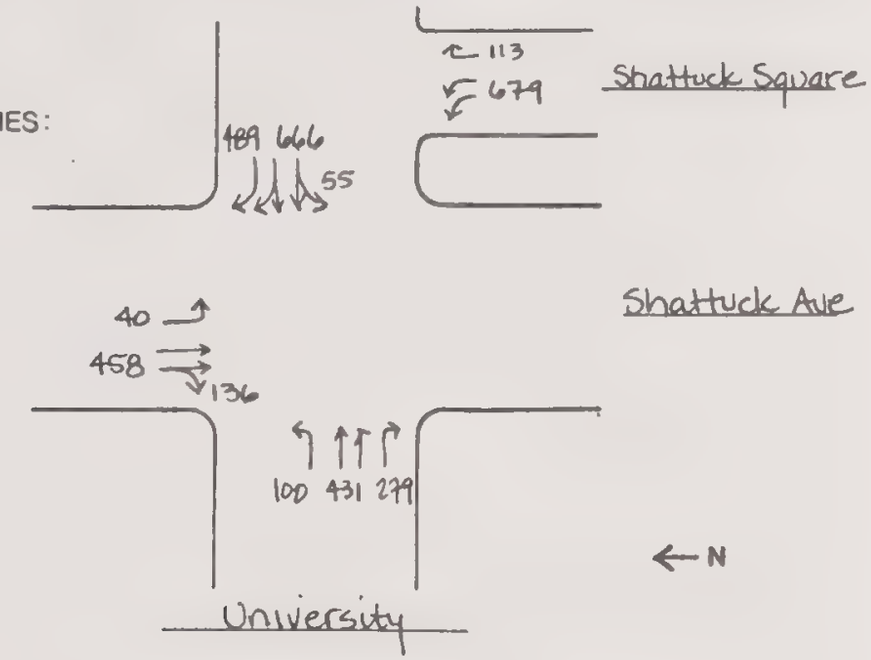
PRC VOORHEES

INTERSECTION CAPACITY ANALYSIS

INTERSECTION Shattuck(s) / University

DESIGN HOUR/YEAR May 1982 pm peak hour

TRAFFIC VOLUMES:



PHASE	CRITICAL MOVEMENT	CAPACITY OF 1/ CRITICAL MOVEMENT	VOLUME	V/C
①	↓↓	2400	679	.28
②	↓↓	3000	531	.18
③	↰↑↑↱	1200	100	.08
④	⇉	3000	458 + 136 = 594	.20
Yellow 9/90=.10 Lag 5/90=.06 .16		YELLOW TIME/CYCLE LENGTH		.16
		V/C OF INTERSECTION		.90
		LEVEL OF SERVICE OF INTERSECTION		D/E

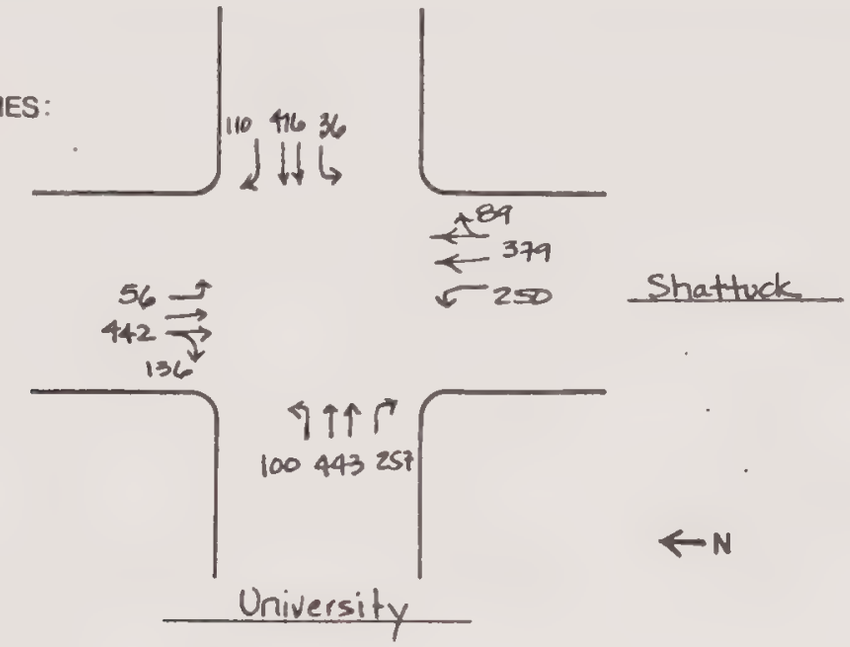
1/ CAPACITIES CALCULATED AT LEVEL OF SERVICE E

PRC VOORHEES

INTERSECTION CAPACITY ANALYSIS

INTERSECTION Shattuck / University
DESIGN HOUR/YEAR Shifted Existing Traffic - Transportation Option A

TRAFFIC VOLUMES:



PHASE	CRITICAL MOVEMENT	CAPACITY OF 1/ CRITICAL MOVEMENT	VOLUME	V/C
①	↱ (E)	1200	250	.21
②	(⇉) ⇇	3000	442 136 578	.19
③	(↰) ↳	1200	100	.08
④	(⇊) ↑↑	3000	416	.14
12/90 = .13		YELLOW TIME/CYCLE LENGTH		.13
		V/C OF INTERSECTION		.75
		LEVEL OF SERVICE OF INTERSECTION		C

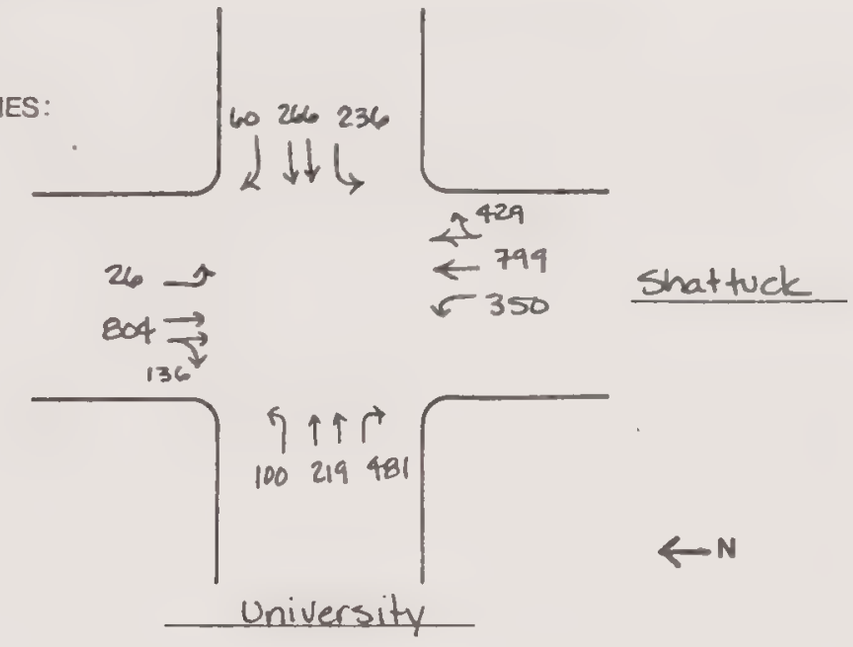
1/ CAPACITIES CALCULATED AT LEVEL OF SERVICE E

PRC VOORHEES

INTERSECTION CAPACITY ANALYSIS

INTERSECTION Shattuck / University
DESIGN HOUR/YEAR Shifted Existing Traffic - Transportation Option B

TRAFFIC VOLUMES:



PHASE	CRITICAL MOVEMENT	CAPACITY OF 1/ CRITICAL MOVEMENT	VOLUME	V/C
①	↱ (E)	1200	350	.29
②	(⇉) ⇇	3000	804 136 940	.31
③	(↰) ↰	1200	236	.20
④	⇊ (↑↑)	3000	219	.07
12/90 = .13		YELLOW TIME/CYCLE LENGTH		.13
		V/C OF INTERSECTION		1.00
		LEVEL OF SERVICE OF INTERSECTION		E/F

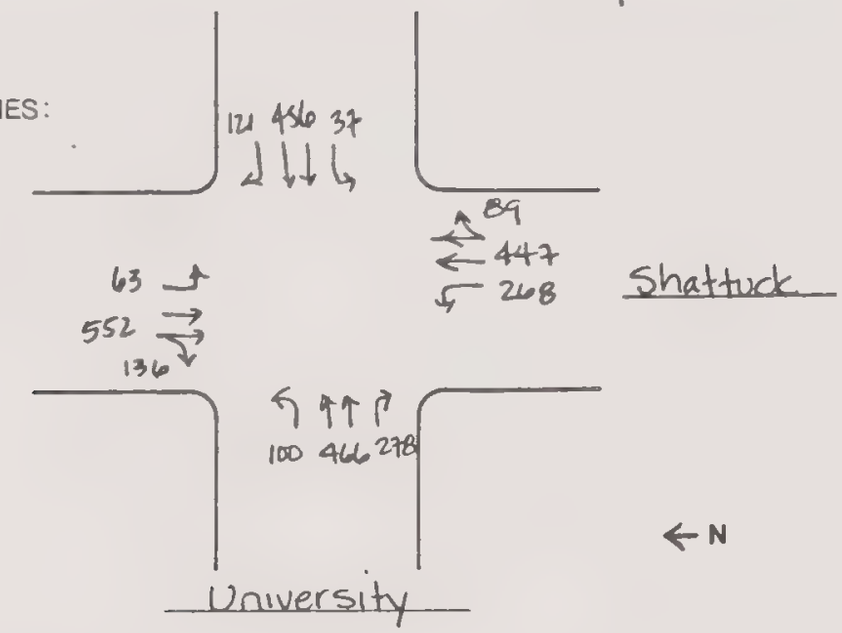
1/ CAPACITIES CALCULATED AT LEVEL OF SERVICE E

PRC VOORHEES

INTERSECTION CAPACITY ANALYSIS

INTERSECTION Shattuck / University
DESIGN HOUR/YEAR 1995 Land Use Alt. 1 - Transportation Option A

TRAFFIC VOLUMES:



PHASE	CRITICAL MOVEMENT	CAPACITY OF 1/ CRITICAL MOVEMENT	VOLUME	V/C
①	↴ (E)	1200	268	.22
②	(3) ⇄	3000	552 + 136 = 688	.23
③	↳ (9)	1200	100	.08
④	(11) ↑↑	3000	456	.15
	12/90 = .13	YELLOW TIME/CYCLE LENGTH		.13
		V/C OF INTERSECTION		.81
		LEVEL OF SERVICE OF INTERSECTION		C/D

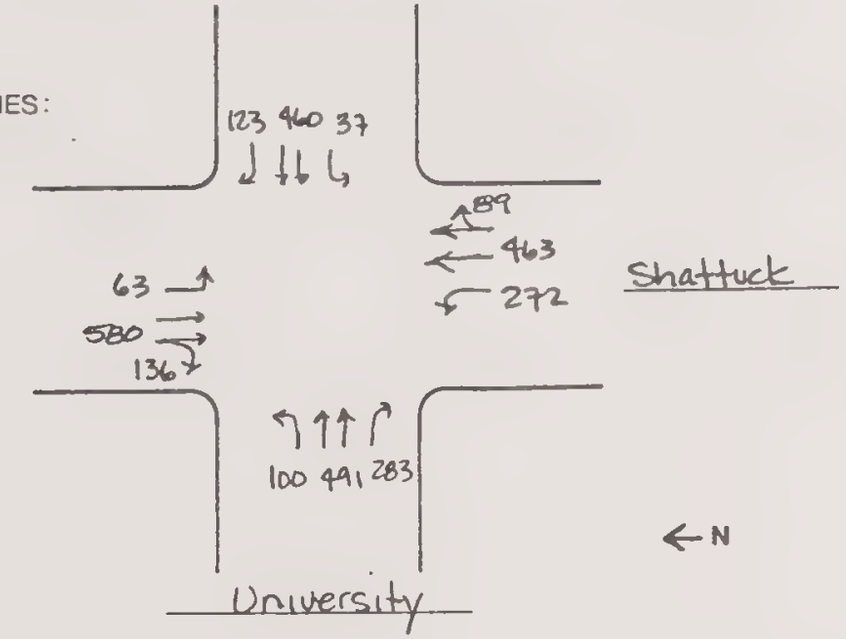
1/ CAPACITIES CALCULATED AT LEVEL OF SERVICE E

PRC VOORHEES

INTERSECTION CAPACITY ANALYSIS

INTERSECTION Shattuck / University
DESIGN HOUR/YEAR pm peak 1995 Land Use Alt 2 - Transportation Option A

TRAFFIC VOLUMES:



PHASE	CRITICAL MOVEMENT	CAPACITY OF 1/ CRITICAL MOVEMENT	VOLUME	V/C
①	↴ (E)	1200	272	.23
②	(3) ⇄	3000	580 + 136 = 716	.24
③	↳ (9)	1200	100	.08
④	(11) ↑↑	3000	460	.15
	12/90 = .13	YELLOW TIME/CYCLE LENGTH		.13
		V/C OF INTERSECTION		0.83
		LEVEL OF SERVICE OF INTERSECTION		D

1/ CAPACITIES CALCULATED AT LEVEL OF SERVICE E

APPENDIX B: INITIAL FINANCIAL ASSESSMENT

Prepared by Lynn Sedway & Associates

INITIAL FINANCIAL ASSESSMENT
WESTSIDE CAMPUS AREA

This brief report discusses the financial feasibility of development alternatives proposed for the Westside Campus Study Area. The first section comments generally on various land uses - office, retail, housing, conference hotel - especially in reference to the economic and market factors analysis prepared for the January, 1982 Phase I Report. The second portion discusses specific options in six of the eight subareas identified by Sedway/Cooke.

GENERAL COMMENTS

OFFICE

As discussed in the Phase I report, office uses constitute the strongest demand potential in Berkeley's downtown area. For the downtown, commercial development currently generates a more attractive return than residential development.

ANALYTIC ASSUMPTIONS. The internal rate of return (IRR) is the annualized yield on equity of the cash flow, added to projected proceeds from future sale property. Internal rate of return analysis, using very optimistic assumptions, for small prototypical office development in downtown Berkeley shows acceptable, though not exceptional, rates of return for investor and lender. (See Figure I attached.) Should actual performance of any variables fall noticeably short of these optimistic projections, returns could become unattractive.

This IRR analysis used the following reasonable, though aggressive, assumptions about the three risk factors in real estate development which are the most difficult to predict:

1. Vacancy - three percent;
2. Rent inflation - seven percent per year;
3. Operating costs - $.35 per square foot, increasing at seven percent per year.

Other important real estate development costs - land, construction, and financing costs - are more certain before construction starts and therefore are less risky to project.

OFFICE DEMAND PROJECTIONS. Employment growth projected in the Phase I report (2,451 office jobs for Berkeley through 1995) may have been conservative, based on new regionwide projections from the Association of Bay Area Governments[1]. ABAG's projection for regional employment growth from 1975-2000 has increased about 40 percent from the 1979 projections used for the Phase I report. Such projections are estimates only. Employment growth depends upon many factors, including corporate relocation decisions, office space availability, housing production, and local land use policies. However, the new ABAG data indicate that demand for office space will exceed the 1995 430,000 square feet projection by 20 to 30 percent, increasing demand through 1995 from 520,000 to 560,000 square feet. The University now estimates a need for approximately 116,000 square feet of office space for administrative services in the Westside Area. This need further supports the 520,000 to 560,000 square feet projection.

In addition to regional employment growth, two major factors could limit office development potential in downtown Berkeley.

1. Land aggregation difficulties limiting construction of larger office spaces;
2. Lack of parking facilities in downtown Berkeley.

Demand for larger space is generated in good part from companies escaping from high San Francisco rents. With the exception of possible office development on the Golden Bear Motors site, planned downtown office

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1. ABAG, Long Term Forecast for the Bay Area.

developments (including Berkeley Tower, now under construction) are relatively small - 22,000 to 33,000 square feet. (See Phase I Economic and Market Factors Report). This analysis indicates that if land suitable for larger office spaces (a building of 100,000-150,000 square feet) were to be made available and parking was provided, downtown Berkeley could attract San Francisco office users presently relocating to downtown Oakland and Contra Costa County. If the San Francisco office market begins to retreat from the extremely strong growth rates experienced in recent years, the downtown Berkeley office market could experience longer lease-ups and smaller rent increases.

Parking is a two-sided development issue. While lack of parking in Downtown currently limits market demand for office space, parking construction is an expensive development cost which pushes up rents. Therefore, the basic Downtown office market must be strong enough to support higher rents for structured parking. These proforma analyses indicate that the market will support structured parking, if the optimistic assumptions hold. Development costs for parking at a ratio of one parking space per 400 gross square feet of office building are used in these analyses. Such parking need not necessarily be built on site. Instead the developer could contribute an equivalent amount as an in-lieu fee towards construction of City-owned parking structures.

These "best case" financial analyses use a three percent vacancy factor each year, representing an extremely strong office demand with significant pre-leasing. In the event that vacancies are 30 percent in the first year, ten percent in the second and three percent thereafter, a normal experience in many office markets, the investor's internal rate of return would drop approximately two and one-half percentage points.

A softening office demand could also reduce annual rent increases, a crucial factor in the projected financial returns for real estate development. If, for instance, the office market experiences three sluggish years, with an average 2.5 percent rent inflation for years two, three, and four before resuming a seven percent annual increase, the owner's internal rate of return would be cut in half (again, assuming all other factors remain unchanged).

Higher-than-projected operating expenses would also reduce the owner's rate of return, although not as dramatically. Full service rents, still relatively common in Berkeley, are especially vulnerable to utility rate increases. If the overall office demand softens, tenants may elect to break leases and move rather than pay rent increases keyed to operating cost increases.

DENSITY. Figure I shows an IRR analysis assuming a floor area ratio (FAR) of 5.0. If allowable densities were increased to a FAR of 7.0, the projected internal rate of return for the office building owner would slightly increase by 1.3 percentage points from 29.0 to 30.3 percent (assuming the same land cost--$30 per square foot). (See Figure 2.)

A density increase from FAR 5.0 to 7.0 would not be a crucial incentive for a developer. However, difficulties in aggregating larger parcels in the downtown tend to weigh in favor of higher densities so that larger office spaces can attract larger users.

GROUND LEASE. If the office development were built on land leased from the University, City, or other public entity, returns to developer and owners would be slightly higher than if the land were acquired. A ground lease reduces the developer's up front investment without affecting tax benefits. Ground lease payments are often less than debt service costs for acquired land. Figure 3 shows that use of a ground lease for the FAR 5.0 office prototype would increase the owner's rate of return by one percentage point (assuming lease payments of 10 percent of land value, escalating 10% per year).

HOUSING

The Phase I report identifies market demand for newly-constructed condominium units in Berkeley's downtown. Each of the subareas has good sites for market rate housing, although development of such units is currently financially infeasible. Downtown land costs and aggregation difficulties dictate mid to high rise construction. However, construction costs for concrete, multi-story buildings are higher than for wood frame townhouses and "walk-up" flats. On the demand side, market support for housing in downtown Berkeley would be oriented to moderately priced rather than luxury units.

FINANCIAL FEASIBILITY. Analysis of financial feasibility for residential development is extraordinarily difficult in today's market. Sustained record-high mortgage interest rates, economic recession, and continued buyer uncertainty about the future economy have pulled the Bay Area real estate market into one of the longest and most severe downturn cycles in post-war years. As a result, construction prices are presently going down. Most analysts feel that housing demand will improve significantly in the future. However, few can predict with any assurance the timing of that upturn.

Currently mid-to-high rise construction costs and high interest rates make development of new condominium housing in downtown Berkeley infeasible. (See Table 1.) At conventional mortgage interest rates (16 to 17 percent), buyers would need incomes of $54,000 to $57,000 to purchase a $140,000, 875 square foot condominium. Market analysis indicates insufficient demand from buyers in that income bracket for such relatively small units in this location.

Marketability would be significantly increased by improved mortgage market conditions or by subsidizing the mortgage interest rate. With below-market financing, at 12 to 13 percent, buyers in the $41,000 to $45,000 income range could afford the same unit. However, without use of City redevelopment powers, such subsidization is not currently possible. Recent Federal legislation[1] precludes the use of tax-exempt financing for housing of this type. Some developers of new condominium projects and condominium conversions have been "buying down" mortgage interest in order to provide affordable financing for their units. However, as shown in Table 1, such developments have insufficient developer profit margins even without the added cost of mortgage buy-downs.

One remaining possibility for subsidy is the use of tax-increments generated through the redevelopment process. The City could use increases in tax revenues from commercial development to subsidize mortgage interest rates or write-down development costs for condominium units.

Although the current market precludes development of condominium units in the downtown, future economic conditions may favor development. As discussed in Phase I, demand for such units exists, if financing, construction costs and overall market conditions adjust. Given such favorable conditions, the units would need to be well-designed, with the following amenities, yet still sell for $120,000 to $160,000:

- good parking and access
- quality interior finishes
- interesting exterior design
- good security
- attractive views of the Bay and hills.

MIXED USE. Mixed use development with condominium apartments built over offices or retail brings several advantages, although it creates significant design challenges. Design problems center on parking, access, and security needs for high-density development on small

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1. Mortgage Subsidy Bond Tax Act of 1980.

sites. Aesthetic issues are also important. Exterior design and a careful mix of residential and office or retail issues can avoid the "apartment over the store" image. Advantages of mixed use development include:

- All residential units could have superior views.
- Since commercial development is currently more lucrative than residential development, a small portion of construction cost for the condominiums could be internally subsidized by the commercial, thereby increasing marketability of the condominiums.
- Mixed use allows housing to be scattered on more sites around the downtown area, easing traffic circulation problems and generating off-hour activity in more locations.

TABLE 1

PROTYPICAL ANALYSIS--
MID- TO HIGH-RISE CONDOMINIUM DEVELOPMENT[1]

	50,000 sq.ft. FAR 5.0	70,000 sq.ft. FAR 7.0
Development Cost		
Land 10,000 s.f. @ $30	$ 300,000	$300,000
Construction Cost		
Housing @ $75 p.s.f.	3,750,000	5,250,000
Parking @ 18.33 p.s.f.	248,000	373,932
Soft costs	1,199,000	1,687,180
Total Development Cost	5,497,000	7,611,112
Sales Income	6,300,000	9,520,000
Developer Profit Margin	13%	20%

RETAIL

Retail business in downtown Berkeley has grown significantly in recent years. However, as discussed in the Phase I report, there is still significant leakage of retail sales to regional shopping centers and Oakland.

Therefore, retail opportunity exists in Berkeley and in the downtown. Office growth and residential construction in the downtown will increase retail demand. Even without further development, there may be demand for another Berkeley department store in the downtown. Land aggregation difficulties have been the basic stumbling block to development of another department store, especially in the area of prime interest--along Shattuck near the two existing stores, Hink's and Penny's. Large, publicly-owned sites, which could be converted to retail use, are not in the prime downtown retail area. Such sites might eventually become prime retail sites after considerably more downtown development, but currently they are secondary sites. An additional downtown department store anchor would be an excellent draw for all downtown retail. Department store potential, however, appear to depend upon City redevelopment powers to acquire and aggregate sufficient land.

FINANCIAL FEASIBILITY. Depending upon location, use of the ground floor for retail space with offices above would enhance the financial viability of an office development. Net income to the developer is usually higher for ground floor retail than for office space. Analysis of such a prototypical complex (Figure 4) shows a rate of return nine points higher than for the same development with offices only.

1. For simplicity this analysis assumes half 1 bedroon units @ 750 sq.ft. for $120,000 and half 2 bedroom units @ 1,000 sq.ft. for $160,000. Actual development plans would vary unit size and mix according to current demand.

Development costs for above grade parking are included in the computations. However, almost certainly such parking would be provided elsewhere, through the use of in-lieu fees, discussed later in this report. On-site parking for a retail/office development would need to be below grade, and this analysis indicates that market rents would not support added construction costs of underground parking.

CONFERENCE HOTEL

The Phase I Economic and Market Factors Report describes market demand for a 250 room hotel with at least 9,000 square feet of conference space. A quality hotel facility would be financially feasible in the Downtown, if a large enough site could be made available.[1] Several factors are key to feasibility:

1. The hotel would need at least 250 sleeping rooms to attract a major, national operator.
2. An operator, such as Holiday Inn, Travel Lodge, or Vagabond, with a national reservation system and well-established marketing ability, would be needed to operate successfully in this off-freeway location.
3. Price sensitivity will be important, given the primarily University-oriented market.
4. The University will need to document and guarantee high conference facility use and a high room occupancy level (at least 35%) for the operator.

The last point is especially crucial. A highly detailed market study will be necessary to determine the optimal design for the hotel facility. It's possible that the complex should be designed as a conference center rather than a hotel with a conference space, although a conventional hotel design and operation appear more appropriate to the market. Office and University non-conference functions should generate considerable demand for first-class hotel space.

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1. This analysis is partially created to C. Barry Robinson, Real Estate Services with Loventhal and Horwath, Certified Public Accounts.

FINANCIAL MECHANISMS

This section briefly summarizes possible development financing options to public owners.

SALE LEASEBACK. The 1981 tax law has significantly increased real estate investment incentives. Recently various public agencies have found that public buildings have considerable value to private investors due to the value of tax benefits. The City of Oakland recently sold the Oakland Museum to an investment partnership. Revenues from the sale are sufficient to make lease payments to the new private owners, as well as provide reserves for bonds sold to rehabilitate the museum of the nearby Oakland Auditorium.

The University might consider the same strategy for academic or office buildings. It would retain ownership of the land, however. Land cannot be depreciated, and depreciation is one of the main tax benefits to the private purchaser.

JOINT VENTURE. The joint venture puts the public entity in partnership with a private developer in a profit-sharing arrangement. However, most public agencies are ill-equipped to function in a development capacity with a private developer for two reasons. Development is not their primary business, and public decision-making processes are inefficient. The University or the City would more effectively develop property by negotiating long-term ground leases with conditions to satisfy public needs. Lease payments could then generate income for other purposes.

GROUND LEASE. Ground leases have significant advantages to the owner in comparison to sale of the property. One advantage is long-term control of the property. Generally, most leases call for improvements to revert to the owner of the land at the end of the lease term. Through the ground lease the landowner can also share in a percentage of the increased income from the development above base rents, without development risks. Ground leases also have advantages to the developer, as discussed in the section on office development.

It is important to note that ground lease terms are unique to each transaction. The University's ground lease revenue could be significantly different from figures used in this report, depending on the lease terms negotiated. Ground leases generally include escalations based on a percentage of gross rents, net operating income or other indexes.

REDEVELOPMENT POWERS. As mentioned earlier, the City could create a redevelopment district in the downtown area. Redevelopment would enable the city to utilize the following powers to facilitate desired programs:

- o tax increment financing--the use of increased tax revenue from new development to subsidize housing, parking structures and other public improvements.

- o land aggregation--the use of eminent domain powers to aggregate land and, where desired, write down the cost of land for development.

DEVELOPMENT FEES. Development fees have been used by municipalities to offset some of the costs of public improvements, usually in areas where strong market incentives exist. Such fees are usually charged on a per square foot basis. In downtown Berkeley, where development costs are high in relation to projected rental income, development fees should only be used inconjunction with offsetting incentives. For instance, development fees could be assessed in lieu of the construction of parking on site. Funds from fees could then be used to build a public parking structure. However, the City currently does not require that parking be included in downtown commercial development. In-lieu parking fees could have a negative impact on planned new construction development, depending upon market demand when fees were instituted.

ASSESSMENT DISTRICT. Special assessment districts, established by vote of affected property owners within the proposed service area, have long been used to generate funds for public services (fire, water, sewer, etc.) and public improvements (parking, flood control, mass transit, etc.). Notwithstanding political difficulties in gaining voter approval for such a district, the City could use assessments to support construction of parking facilities.

TAX-EXEMPT FINANCING. Again, tax-exempt bonds enable redevelopment agencies to finance various development projects ranging from housing to freeways. The Mortgage Subsidy Bond Tax Act of 1980 (federal legislation) substantially restricts the use of tax-exempt bonds for owner-occupied housing. However, bonds could be sold for commercial/industrial development.

FISCAL IMPLICATIONS OF COMMERCIAL DEVELOPMENT IN THE DOWNTOWN AREA

This section assesses fiscal implications of office and retail uses.

OFFICE USES. Office developments produce considerable property tax revenue initially. Under Proposition 13, however, these revenues can increase at a maximum of two percent annually, until such time as the property is sold, when property taxes are one percent of the fair market value, generally based on the sales price. However, property tax revenue from office buildings does

not increase as rapidly as that for residential because the turnover rate for office buildings tends to be fairly low compared to residential. It is likely that Proposition 13 will be revised to a split role where commercial properties are taxed in a different manner than residential. This would increase office property tax revenues.

The amount of property, as well as sales, tax generated depends to a consideable extent on the scale of the development. Property and sales tax revenue are anticipated to increase at approximately that same rate as the increased size of the development. Thus, for example, a FAR of 1.5 would be expected to produce property tax revenues approximately 50 percent greater than a similar development with a FAR of 1.0. Sales tax revenues would also increase, due to the greater number of employees in the area.

Property now owned by the University and private property leased by the University is tax-exempt. If the University were to lease its land for private development, this property would come onto the tax rolls and generate tax revenue for the City.

The cost of public services associated with office developments is generally quite low. Safety services do not have to be provided 24 hours a day, and other services such as schools are not needed. A higher FAR is not likely to be associated with considerably higher public costs, except for traffic circulation.

RETAIL USES. In general, retail uses are associated with the most positive fiscal impact, since retail generates sales tax as well as property tax revenues. Both residential and office uses generate retail sales. Office employees purchase retail goods, particularly including restaurant meals. The amount of sales, of course, depends on the availability of other retail and the quality of the retail near the office development. Some studies have shown an average of $1,000 per year per employee spent on retail sales, with one percent of the sales kept by the local jurisdiction in sales tax revenue. This again depends on the availability of retail outlets in the area. Also, with the increasing number of two wage earner households, it is likely that there is an increase in retail purchases near places of employment.

SUBAREA DEVELOPMENT OPTIONS

SUBAREA 1: BERKELEY WAY/WALNUT STREET

The University garage presently sits on a prime site for office use. As shown in Table 2, costs to the University for converting the garage space to University offices would be less in the long term than leasing the same amount of space in a newly constructed, privately owned office building.

The garage conversion and rehabilitative option gives the University some land-banking leverage. The University can raise the use of the property and hold it more cheaply than can a private developer who would have higher debt service, land, and tax expenses.

Another option for the University is to sell or lease the garage property to a private developer for commercial use. Base annual ground lease income for the 12,000 square foot site would approximate $36,000. Since land cost is relatively high, a private developer would need to construct substantially more than 12,000 square feet of office space. Therefore, the garage structure has a negative value (approximately $1.50 to $2.00 per square foot demolition cost) to the private developer and would have some slight impact on ground lease negotiations.

A further consideration for the garage site is that it is only a secondary retail site. Until Downtown development significantly intensifies, retail development will be more highly attracted to Shattuck Avenue, closer to Allston and Center.

TABLE 2

UNIVERSITY GARAGE
COMPARATIVE ANNUAL COSTS =
REHAB. vs PRIVATE LEASE

A. Rehabilitation costs: 12,000 sq.ft @ $40, $480,000		
Annual debt service cost @ 13%; 25 yrs	=	$65,000
Operating costs @ .25/sq.ft./month	=	30,600
Foregone ground lease income	=	36,000
Garage lease cost elsewhere @ .50/sq.ft./month	=	$ 72,000
Total annual costs to university[1]	=	$203,600
B. Annual lease payments for space in newly constructed offices @ 1.75/sq.ft./month	=	$252,000 (excluding rent escalations)

1. Foregone ground lease revenue is included in these calculations since this is an opportunity cost to the University for this site.

SUBAREA 2: ADDISON STREET

A potential development option in this area is increasing the University office space in University Hall by adding four to five stories (37,000 square feet) onto the existing structure. Assuming that the existing structure could carry the addition and assuming that seismic problems could be solved, construction costs for this expansion might be slighly less than ground-up construction costs.

Even if construction costs were comparable, this expanded space would still be significantly cheaper to the University than leased space in a new privately owned building. See Table 3 below:

TABLE 3

UNIVERSITY HALL
ESTIMATED COMPARATIVE ANNUAL COSTS
EXPANSION vs PRIVATE LEASE

A. Construction costs: 37,000 @ $70, $2,590,000		
Annual debt service @ 13%; 25 yrs.	=	350,500
Annual operating cost @ .25/sq.ft./month	=	94,350
Total annual costs to university[1]	=	$ 444,850
B. Lease Payments @ 1.75/sq.ft./month	=	$777,000 (excluding rent escalations)

1. Lost ground lease income is not included here because this site is already highly utilized and therefore is not feasible for private development.

Similar comments apply to the retail potential of this site as to the garage site. It is now a secondary retail location, although retail demand could occur in future years.

SUBAREA 3: CENTER STREET

The University Printing Department occupies a prime Downtown commercial location, clearly not the best use from an economic standpoint. This site has greater development potential than the garage site because it is

larger and could support 110,000 to 170,000 square feet of office space. (As discussed earlier there is a scarcity of large, privately-owned office sites in the Downtown.)

If aggregated with the Teknekron site across Center Street, the combined 1.46 acre site would have potential for a mixed-use office, retail, and hotel development, as suggested by Sedway/Cooke in Option 3 for this subarea. The location is adequate for ground floor retail and excellent for offices and hotel space.

This analysis suggests that market rents may be insufficient to cover added construction costs of the planned air rights development, spanning Center Street. However, the feasibility of air rights development would need much more careful attention in a project-specific feasibility study.

The University also has the option of converting and expanding the print shop to use for University offices or as museum space. As shown in prior analyses of the garage and University Hall sites, conversion and rehabalitation of existing structures is less costly to the University over the long term than leasing private space in the Downtown. Table 4 displays comparative costs for the University print shop structure.

SUBAREA 4: OXFORD TRACT

The Oxford Tract is, of course, the largest potential development site in the study area. It's size and good location make the tract extremely attractive. It is probably worth more on a per square foot basis than other land in the study area. Therefore, if the University decides against private development for the tract, it should opt for a University use which needs close campus proximity.

TABLE 4

UNIVERSITY PRINT SHOP
COMPARATIVE COSTS:
REHABILITATION vs PRIVATE LEASE

A. Rehabilitation costs 34,700 sq.ft @ $40, $1,388,000		
Annual debt service costs @ 13%; 25 yrs.	=	$180,440
Annual operating costs @ .25/sq.ft./month	=	88,485
Annual lost ground lease income	=	90,000
Print shop lease elsewhere @ .50/sq.ft./month	=	208,200
Total Annual Costs to University	=	$567,125
B. Annual private lease @ 1.75/sq.ft./month (excluding rent escalations)	=	$728,700

Projections of Berkeley office demand through 1995, discussed earlier, make office development of the entire site unlikely. Land value is high enough to command development at FAR's of at least 2.0 to 3.0. Therefore private development of two to three acres of the 5.8 acre tract seems appropriate for the potential market. Annual ground lease income to the University for two acres would start at approximately $300,000; for three acres approximately $450,000.[1]

1. Assuming land value @ $35 per square foot and lease payments at 10 percent of value.

While the location is ideal for highly-technical, research-oriented office users, other Downtown sites are close enough to the University to attract such users. The draw for office space located on the Tract would clearly be it's size. The market could then be open to larger space users.

The example of Cetus Corporation's agricultural research operations in Madison, Wisconsin, has been raised during this study as a possible model for a private research corporation using University staff. The Director of Research for Cetus' Madison office is a halftime professor at the University of Wisconsin. Cetus leases only 10,000 square feet of space and it is located in Middleton, about five miles from the campus.

SUBAREAS 7 AND 8: KITTRIDGE STREET AND BANCROFT LOT

Here the prime development opportunities are, of course, the 43,000 sq.ft. City parking lot and the 104,544 sq.ft. University-owned Bancroft parking lot. It is a prime location for office and/or hotel use. Because of prime location and high land values, the City or University could negotiate with a developer to reduce ground lease payments in return for construction of on-site parking to replace lost City lot parking. To produce replacement parking spaces in an on-site parking structure (below office or hotel space) the City or University would need to forego at least $5,500 in capitalized land value for each parking space.[1] Although design and access considerations could limit the number of on-site public parking spaces, the City or University could trade the parking land free of charge for on-site replacement parking. In trade, a developer could construct approximately 235 public parking spaces on the City lot without charge to the city without significantly affecting financial feasibility of the private commercial development. The Bancroft lot could be traded for up to 570 University parking spaces, although aesthetic and access issues probably preclude putting that much parking in one location.

In negotiating the terms of a ground lease, the City or University might also reap some of the tax benefits to the developer of owning a public parking structure. For instance the annual tax savings to the investor resulting from depreciation deductions for 235 parking spaces would be at least $43,000.[2] The City might negotiate half of that tax savings as potential ground lease income.

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1. Assumes construction costs of $5,500 per space and land values at $30/sq.ft.

2. Developer tax benefit assumed to be 50 percent of depreciation on construction cost of 235 public parking spaces (15 year straight-line depreciation).

STUDENT HOUSING

This analysis examines the financial feasibility of private development of student housing for the university. the pro forma analysis shown in Table I assumes development of the Bancroft lot with 115 student apartments (940 square foot, two bedroom units with four beds). The development also includes 20,000 square feet of ground floor retail space fronting on Bancroft and 20,000 square feet of covered parking. This preliminary pro forma indicates that development costs, exclusive of land, for residential units and associated parking spaces total approximately 9.1 million or $19,800 per bed.

The pro forma assumes private development and management on land leased on a long-term basis from the university at no cost. This arrangement passes through tax deductions from depreciation to private investors and generates private equity investment for the development. However, two factors unique to development of student housing make construction of new student housing financially infeasible for a private developer without substantial subsidy. The high assumed debt cover ratio[1] and the low rent level relative to development costs[2] produce an unusually large equity requirement of almost $4.5 million (43 percent of total development cost) and reduce projected returns over a 10-year period.

In addition to provision of land at no cost, use of private equity capital would require additional subsidy from the University. To attract private investment and allow for an attractive after-tax return over 10 years[3], rents need the capacity to increase up to 7 percent per year. A 7 percent annual increase may exceed University affordability criteria for student housing rents. If so, the Unviersity could subsidize rents according to conditions and procedures set forth in the ground lease. For example, if the University allowed rents in this development to increase 2 percent per year, and the development required a 7 percent per year increase, the University's subsidy of the cash difference between increases at 7 percent and 2 percent over 10 years would total approximately $1.6 million (net present value at a 10 percent discount rate).

This $1.6 million subsidy is still less than half of the $4.5 million in private equity generated by private development and management. The actual subsidy could total considerably less than $1.6 million since student rents could increase more than 2 percent per year, and the development might not require a full 7 percent increase each year, if expenses do not increase as rapidly as expected. However, the full $1.6 million would need to be invested and reserved for the development to provide security for the developer and the bond issue.

This joint development concept appears financially advantageous for the University. However, the terms of a subsidy agreement between the University and the private owner would need to be carefully structured to reward good design and managment, punish poor quality, and protect the University in the unlikely event that the owner abandons the property. Terms which would protect the University and still attract a private owner/manager

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1 Financing terms for the pro forma assume a debt coverage ratio of 1.35 as specified in the University's current bond indenture for student housing, according to the University's Coordinator - Physical Planning, Dorothy Walker.

2 As shown in Table I, rent affordability is assumed at $175 per month per student or $700 per unit per month, as reported by the Berkeley Campus Housing Office.

3 Table I shown an annual after-tax internal rate of return on equity, given sale after 10 years, of 17 percent.

could be extremely difficult to negotiate, since the developer would be required to submit to a form of rent control. Thorough evaluation of the actual practicality of this concept is important, but beyond the scope of this study.

FACULTY HOUSING

The analysis also tested the financial feasiblity of four different pro forma concepts for development of moderateley-priced multi-unit housing affordable to new assistant professors.

1. Use of 2.5 acres onthe north end of the Oxford tract for high density, one- and two-bedroom small rental apartments[4] (see Table 2).

2. Condominium development on the same Oxford tract site at the same density and design.[5] (See Table 3).

3. High-rise rental housing in the downtown center[6] (see Table 4).

4. High-rise condominium housing in the downtown center[7] (see Table 5).

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4 Assumes 30 units per acre; 800 square foot average unit size (700 square foot one-bedroom, 900 square foot two-bedroom), two-story apartments; surface parking.

5 Ibid.

6 Assumes a six- to seven-story high-rise with underground parking, and ground floor retail; 800 square foot average unit size (700 square foot one-bedroom; 900 square foot two-bedroom).

7 Ibid.

Rental housing concepts assume private development, ownership and management on land leased from the University on a long-term basis. Condominium pro forma assume sale of the land to the developer with deed restrictions regarding home prices. Several problems with financing for the owner occupied housing on leased land limit the potential of such leases for condominium use in the near future, especially when non-faculty housing is included.

Each concept assumes that the University would pruchase a portion of the units from the developer and lease or resell them to faculty, according to pre-specified terms in the ground lease or grant deed. The University could also maintain first right of refusal on non-faculty units as they turn over. This arrangement has several advantages:

- financially efficient larger complexes;
- provision of moderately-priced housing for the non-University community;
- avoidance of the negative image of a "faculty compound."

The use of 30-year, fixed-rate, tax-exempt financing, issued by the University or the City of Berkeley is assumed in pro forma analyses for rental and condominium housing. Although continuation of tax-exempt status for mortgage revenue bonds beyond January 1, 1984 is not assured, future availability of some form of tax-exempt financing seems likely.

The concept of mixed faculty-student housing was not analyzed because it seems unattractive. Design of a mixed development would be more complex since faculty and students have different lifestyles and expectations. More importantly, however, a mixed faculty-student development could encounter significant marketing problems.

Oxford Tract

Development of moderately-priced housing on the north end of the Oxford tract appears financially attractive to both a private developer and the University for several reasons:

1. The site is an excellent location for high-density development with smaller units.

2. the site is flat, presents no unusual construction problems, and is large enough to handle relatively inexpensive low-rise construction and surface parking, thereby reducing development costs per unit.

3. Rental housing development on the Oxford tract would not generate nearly as much ground lease revenue to the University as would commercial development. However, Table 2 indicates the the development could support annual ground lease payments of approximately $87,000 for the first 5 years and $140,000 for years five through ten. Affordable condominium development (see Table 3) would support a land value of $10 per square foot, a total sales price of approximately $1.1 million.

Table 2, Pro Forma Analysis for Rental Housing, assumes an average rent of $650 per month, with seven percent average annual rent inflation. This yields an attractive after-tax 23 percent annual return for the owner. Even in rents were to increase by a lower average of five to six percent per year, the internal rate of return over a 10-year period appears high enough to attract a private developer.[8]

Table 3 projects the average low-rise condominium sales price at $70,200, using identical design, construction cost assumptions. Minimum buyer income necessary to support the average purchase price, including debt service and condominium fees, would be $28,300.[9] This minimum income is not far above the 1982-83 average starting salary for assistant professors ($25,600). Since this sales price figure averages prices for less expensive one-bedroom units with more expensive larger units, and since many household incomes would exceed starting salaries, this average sales price appears accessible to most new assistant professors and their families.

DOWNTOWN HIGH RISE

Tables 4 and 5 show pro forma analyses for high-rise (six- to seven-story) residential development over ground floor retail and limited underground parking. Table 4 shows that even if the University were to lease the land at no cost, a rental development affordable to new assistant professors ($700 per month) would not generate attractive after-tax rates of return for a private owner. Given expensive high-rise development costs, achieving an attractive return to the developer would push rents beyond levels affordable to new faculty.

Table 5 estimates the average sales price for a high-rise condominium with the same design at approximately $107,300 with no land cost. The minium buyer income to carry this average purchase price and condominium fees

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[8] This Table 2 pro forma and Table 4 pro forma for high-rise rental housing assume 15-year straight line depreciation. If eventual resident income levels met then current low income definition, accelerated depreciation might be used. Accelerated depreciation would produce even more attractive after-tax rates of return for the owner.

[9] Assumes a 90 percent loan, 12 percent fixed interest rate, 30-year mortgage, $125 per month condominium fees, and 33 percent of income for housing expenses.

would be $40,900, considerably above the $25,600 average 1981-82 starting salary. Sales prices in this pro forma mixed retail/residential condominium development are lower than in a straight residential development. This analysis projects sale of the more profitable retail space after completion and leasing and uses profit from that sale to subsidize condominium sales prices. Sale of the retail space provides a $7,200 average per unit condominium sales price subsidy.

TABLE I

PRO FORMA ANALYSIS

STUDENT APARTMENTS

ASSUMPTIONS

SURFACE PARKING	70 SPACES	$	15.00 PER MONTH
COVERED PARKING SPACES	50 SPACES	$	15.00 PER MONTH
COVERED PARKING AREA	20000		
GROSS RETAIL AREA (SQ.FT.)	20000	$	1.50/SQ.FT./MO, TRIPLE NET
NUMBER OF RESIDENTAL UNITS	115		4 BEDS PER UNIT
UNIT SIZE (SQUARE FEET)	940		0.90 BUILDING EFFICIENCY RATIO
YEAR 1 RENT/STUDENT/MO	$ 175.00	$	41.67 EXPENSES/BED/MONTH

INCOME INFLATION RATES:		
PARKING	0.02	0.10 ANNUAL EXP INFLATION RATE
RETAIL	0.10	
HOUSING (COST TO STUDENTS)	0.02	
HOUSING (MARKET RENT INFL)	0.07	

NUMBER OF BEDS	460		
DEVELOPMENT COST/SQ.FT.	$ 65.00		
DEPRECIATION METHOD	15 YEARS STRAIGHT LINE		
		PARCEL SIZE	104544 SQ. FT.
LOAN TERMS:			
ANNUAL INTEREST RATE	0.12	LAND VALUE/SF	$ 35.00(GROUND LEASE)
AMORTIZATION SCHEDULE	30	TOTAL LAND VALUE	3659040
LENDER'S SHARE OF CASH FLW	0.00		
1.35 DEBT COVERAGE RATIO		SALES EXPENSES	0.06%

10 YEAR HOLDING PERIOD

FIRST YEAR INCOME:

PARKING	21600
RETAIL	360000
HOUSING	966000
TOTAL	1347600

MARGINAL TAX RATES:

ORDINARY INCOME	0.50
CAPITAL GAIN	0.20

DEVELOPMENT COSTS:

PARKING	1300000
RETAIL	1300000
HOUSING	7807222
TOTAL	$ 10407222
LOAN AMOUNT	-5944711
EQUITY REQUIRED	4462511

GROUND RENT PAYMENTS EQUAL	0 PERCENT OF LAND VALUE: INFLATING AT								10% YEAR; ADJUSTED		
YEARS 1-5	0	AFTER			5 YEARS						
YEAR 5-10	0										
YEARS 10+	0										

HOUSING SUBSIDY SCHEDULE:

MRKT RENT	966000	1033620	1105973	1183392	1266229	1354865	1449706	1551185	1659768	1775952	1900268
STUDENT'S	966000	985320	1005026	1025127	1045629	1066542	1087873	1109630	1131823	1154459	1177549
SUBSIDY	0	48300	100947	158265	220599	288323	361833	441555	527945	621492	722720

TOTAL SUBSIDY 3491978

NET PRESENT VALUE@ 0.10 DISCOUNT 1632070

TABLE I (Page Two)

STUDENT APARTMENTS

CASH FLOW ANALYSIS

CASH FLOW

YEAR	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	NINE	TEN	ELEVEN
OVERALL VACANCY	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
GR INCOME											
PARKING	21600	22032	22473	22922	23381	23848	24325	24812	25308	25814	26330
RETAIL	360000	396000	435600	479160	527076	579784	637762	701538	771692	848861	933747
HOUSING	966000	1033620	1105973	1183392	1266229	1354865	1449706	1551185	1659768	1775952	1900268
TOTAL	1347600	1451652	1564046	1685474	1816685	1958497	2111793	2277535	2456768	2650627	2860346
-VACANCY	-121284	-130649	-140764	-151693	-163502	-176265	-190061	-204978	-221109	-238556	-257431
EFF GROSS	1226316	1321003	1423282	1533781	1653184	1782232	1921731	2072557	2235659	2412070	2602915
-EXPENSES	-230018	-253020	-278322	-306154	-336770	-370447	-407492	-448241	-493065	-542371	-596608
-GRD RENT	0	0	0	0	0	0	0	0	0	0	0
NOI	996298	1067983	1144960	1227627	1316414	1411785	1514240	1624316	1742594	1869699	2006306
-DEBT SER	-737998	-737998	-737998	-737998	-737998	-737998	-737998	-737998	-737998	-737998	
CASH FLOW AFTER FIN	258299	329985	406961	489628	578416	673787	776241	886318	1004595	1131701	
-PARTICIP	0	0	0	0	0	0	0	0	0	0	
B/4 TAX CASH FLOW	258299	329985	406961	489628	578416	673787	776241	886318	1004595	1131701	
B/4 TAX RETURN	0.06	0.07	0.09	0.11	0.13	0.15	0.17	0.20	0.23	0.25	
+PRINCPLE	24633	27589	30899	34607	38760	43411	48621	54455	60990	68309	
-DEPRCN	-520481	-520481	-520481	-520481	-520481	-520481	-520481	-520481	-520481	-520481	
TAXABLE INCOME	-237549	-162908	-82621	3754	96694	196717	304361	420291	545104	679528	
TAX SAV/ (COST)	118775	81454	41310	-1877	-48347	-98358	-152151	-210146	-272552	-339764	
AFTER TAX CASH FLOW	377074	411439	448272	487751	530068	575428	624051	676172	732043	791937	
AFTER TAX RETURN	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.18	

SELLING PRICE DETERMINED BY CAPITALIZING THE 11YEAR NOI@ 0.10

ORIGINAL LOAN AMT	5944711	EQUITY REQUIRED	4462511	ORD INC TAX RATE	0.50
GROSS SALES PRICE	20063062	LOAN AMT DUE	5512436	CAP GAIN TAX RATE	0.20
DEPRECIATED BASIS	2602407	SELLING EXPENSES	1203784	LENDER'S SHARE #	0
TAXABLE GAIN	16256871	TAX DUE ON SALE	3251374	AFTER TAX GAIN	10095468
BEFORE TAX GAIN	13346842			FROM SALE	

EQUITY RQ -4462511 A/T CASH FLOW	377074	411439	448272	487751	530068	575428	624051	676172	732043	10887404

INVESTOR'S AFTER TAX INTERNAL RATE OF RETURN 17.04%

TABLE 2

FACULTY HOUSING

LOW-RISE RENTAL

ASSUMPTIONS

SURFACE PARKING	75 SPACES		
NUMBER OF RESIDENTAL UNITS	75		
UNIT SIZE (SQUARE FEET)	800	0.98	BUILDING EFFICIENCY RATIO
YEAR 1 RENT PER UNIT PER MO	650.00	125.00	EXPENSES PER UNIT PER MONTH
INCOME INFLATION RATE	0.07	0.07	ANNUAL EXP INFLATION RATE
NUMBER OF BEDROOMS	ONE & TWO	61224	SQ. FT. GROSS BLDING AREA
DEVELOPMENT COST PER SQ. FT	55.00	3367347	TOTAL DEVELOPMENT COST
DEPRECIATION METHOD	15 YEARS STRAIGHT LINE		

LOAN TERMS:		PARCEL SIZE	108900 SQ. FT.
ANNUAL INTEREST RATE	0.12	LAND VALUE/SF	8.00(GROUND LEASE)
AMORTIZATION SCHEDULE	30	TOTAL LAND VALUE	871200
LENDER'S SHARE OF CASH FLW	0.00		
1.25 DEBT COVERAGE RATIO		SALES EXPENSES	0.06

10 YEAR HOLDING PERIOD

MARGINAL TAX RATES:

ORDINARY INCOME	0.50
CAPITAL GAIN	0.20

INCOME 585000 (YEAR ONE)

DEVELOPMENT COSTS	3367347
LOAN AMOUNT	-2294954
EQUITY REQUIRED	1072393

GROUND RENT PAYMENTS EQUAL 10 PERCENT OF LAND VALUE: INFLATING AT 10% YEAR; ADJUSTED

YEARS 1-5	87120	AFTER	5TH YEAR
YEAR 6-10	140308	AND AGAIN AFTER	10TH YEAR
YEARS 10+	225967		

TABLE 2 (Page Two)

FACULTY HOUSING LOW-RISE RENTAL

CASH FLOW ANALYSIS

CASH FLOW

YEAR	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	NINE	TEN	ELEVEN
VACANCY RATE	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
GR INCOME	585000	625950	669767	716650	766816	820493	877927	939382	1005139	1075499	1150784
-VACANCY	-29250	-31298	-33488	-35833	-38341	-41025	-43896	-46969	-50257	-53775	-57539
EFF GROSS	555750	594653	636278	680818	728475	779468	834031	892413	954882	1021724	1093244
-EXPENSES	-112500	-120375	-128801	-137817	-147465	-157787	-168832	-180650	-193296	-206827	-221305
-GRD RENT	-87120	-87120	-87120	-87120	-87120	-140308	-140308	-140308	-140308	-140308	-225967
NOI	356130	387158	420357	455880	493890	481373	524891	571455	621278	674589	645973
-DEBT SER	-284904	-284904	-284904	-284904	-284904	-284904	-284904	-284904	-284904	-284904	
CASH FLOW AFTER FIN	71226	102254	135453	170976	208986	196469	239987	286551	336374	389685	
-PARTICIP	0	0	0	0	0	0	0	0	0	0	
B/4 TAX CASH FLOW	71226	102254	135453	170976	208986	196469	239987	286551	336374	389685	
B/4 TAX RETURN	0.07	0.10	0.13	0.16	0.19	0.18	0.22	0.27	0.31	0.36	
+PRINCPLE	9510	10651	11929	13360	14963	16759	18770	21022	23545	26371	
-DEPRCN	-224490	-224490	-224490	-224490	-224490	-224490	-224490	-224490	-224490	-224490	
TAXABLE INCOME	-143754	-111586	-77108	-40153	-540	-11261	34267	83084	135430	191566	
TAX SAV/ (COST)	71877	55793	38554	20077	270	5631	-17134	-41542	-67715	-95783	
AFTER TAX CASH FLOW	143103	158046	174007	191053	209256	202100	222853	245009	268660	293902	
AFTER TAX RETURN	0.13	0.15	0.16	0.18	0.20	0.19	0.21	0.23	0.25	0.27	

SELLING PRICE DETERMINED BY CAPITALIZING THE 11YEAR NOI@ 0.10

ORIGINAL LOAN AMT	2294954	EQUITY REQUIRED	1072393	ORD INC TAX RATE	0.50
GROSS SALES PRICE	6459730	LOAN AMT DUE	2128074	CAP GAIN TAX RATE	0.20
DEPRECIATED BASIS	1122449	SELLING EXPENSES	387584	LENDER'S SHARE *	0
TAXABLE GAIN	4949697	TAX DUE ON SALE	989939	AFTER TAX GAIN FROM SALE	2954132
BEFORE TAX GAIN	3944072				

EQUITY RQ -1072393 A/T CASH FLOW	143103	158046	174007	191053	209256	202100	222853	245009	268660	3248035

INVESTOR'S AFTER TAX INTERNAL RATE OF RETURN 23.16%

TABLE 3

FACULTY HOUSING LOW-RISE CONDOMINIUMS

AFFORDABILITY ANALYSIS

UNIT SIZE	800 SQUARE FEET		
PARCEL SIZE	108900 SQUARE FEET		
LAND PRICE/Sq.Ft.	10.00	FINANCING:	
LAND COST/ACRE	435600	INTEREST RATE	12% PER YR
UNITS PER ACRE	30	TERM	30 YEARS
HARD COST/Sq.Ft.	45.00		
		ANNUAL EXPENSES $	1500 PER UNIT
SOFT COST/Sq.Ft. 25% OF HARD	10.00	PERCENT OF INCOME FOR HOUSING EXP	.33
DEVELOPMENT COST	55.00/Sq.Ft.		
DEVELOPMENT COSTS PER UNIT		SELLING PRICE	70224
		LESS DOWNPAYMENT @ 10%	-7022
HARD	36000		
SOFT	8000	EQUALS LOAN AMOUNT	63202
DIRECT	44000	ANNUAL MORTGAGE PAYMENT	7846
LAND	14520		
		PLUS CONDO FEES	1500
DEV COSTS	58520		
		EQUALS HOUSING EXPENSES OF $	9346 PER YEAR
20% PROFIT	11704		
		OR $	779/ MONTH
TOTAL	70224		
		INDICATES ANNUAL HOUSEHOLD INCOME	28321

TABLE 4

FACULTY HOUSING HIGH-RISE RENTAL WITH RETAIL

ASSUMPTIONS

RETAIL SPACE (SQ.FT.)	5000	RENTING AT	$ 1.50	PER SQ.FT./MO NNN
SURFACE PARKING	60	SPACES, AT	$ 30.00	PER MONTH PER UNIT (YEAR 1)
NUMBER OF RESIDENTAL UNITS	60;	RENTING FOR	$ 650.00	PER MONTH (YEAR 1)
AVERAGE UNIT SIZE (SQ.FT.)	800		0.90	BUILDING EFFICIENCY RATIO
			125.00	EXPENSES PER UNIT PER MONTH
			0.07	ANNUAL EXP INFLATION RATE

INCOME INFLATION RATES:

PARKING	0.07
RETAIL	0.10
HOUSING	0.07

FIRST YR ANNUAL INCOME:

RESIDENTIAL	468000
RETAIL	90000
PARKING	21600
TOTAL	579600

NUMBER OF BEDROOMS ONE & TWO

DEVELOPMENT COST PER SQ. FT

PARKING	25.00
RETAIL	78.00
HOUSING	98.00

53333 SQ. FT. GROSS RESIDENTIAL
5000 SQ. FT. GROSS RETAIL
20000 SQ. FT. GROSS PARKING
78333 SQ. FT. TOTAL BUILDING AREA

6116667 TOTAL DEVELOPMENT COST

DEPRECIATION METHOD 15 YEARS STRAIGHT LINE

LOAN TERMS:

ANNUAL INTEREST RATE	0.12
AMORTIZATION SCHEDULE	30
LENDER'S SHARE OF CASH FLW	0.00

PARCEL SIZE	10000 SQ. FT.
LAND VALUE/SF	30.00(GROUND LEASE)
TOTAL LAND VALUE	300000

1.25 DEBT COVERAGE RATIO

SALES EXPENSES 0.06

10 YEAR HOLDING PERIOD

MARGINAL TAX RATES:

ORDINARY INCOME	0.50
CAPITAL GAIN	0.20

DEVELOPMENT COSTS	6116667
LOAN AMOUNT	-2968303
EQUITY REQUIRED	3148364

GROUND RENT PAYMENTS EQUAL 0 PERCENT OF LAND VALUE: INFLATING AT 10% YEAR; ADJUSTED

YEARS 1-5	0		AFTER	5TH YEAR	
YEAR 6-10	0	AND AGAIN AFTER		10TH YEAR	LAND VALUE (ESTIMATE)
YEARS 10+	0				YEAR 1 300000
					YEAR 5 483153.0
					YEAR 10 778122.7

TABLE 4 (Page Two)

FACULTY HOUSING HIGH-RISE RENTAL WITH RETAIL

CASH FLOW ANALYSIS

CASH FLOW

YEAR	ONE	TWO	THREE	FOUR	FIVE	SIX	SEVEN	EIGHT	NINE	TEN	ELEVEN
VACANCY RATE	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
GR INCOME											
PARKING	21600	23112	24730	26461	28313	30295	32416	34685	37113	39711	42490
RETAIL	90000	99000	108900	119790	131769	144946	159440	175385	192923	212215	233437
HOUSING	468000	500760	535813	573320	613453	656394	702342	751506	804111	860399	920627
TOTAL	579600	622872	669443	719571	773535	831635	894198	961575	1034147	1112325	1196554
-VACANCY	-28980	-31144	-33472	-35979	-38677	-41582	-44710	-48079	-51707	-55616	-59828
EFF GROSS	550620	591728	635971	683593	734858	790053	849488	913496	982440	1056709	1136726
-EXPENSES	-90000	-96300	-103041	-110254	-117972	-126230	-135066	-144520	-154637	-165461	-177044
-GRD RENT	0	0	0	0	0	0	0	0	0	0	0
NOI	460620	495428	532930	573339	616886	663824	714422	768976	827803	891247	959683
-DEBT SER	-368496	-368496	-368496	-368496	-368496	-368496	-368496	-368496	-368496	-368496	
CASH FLOW AFTER FIN	92124	126932	164434	204843	248390	295328	345926	400480	459307	522751	
-PARTICIP	0	0	0	0	0	0	0	0	0	0	
B/4 TAX CASH FLOW	92124	126932	164434	204843	248390	295328	345926	400480	459307	522751	
B/4 TAX RETURN	0.03	0.04	0.05	0.07	0.08	0.09	0.11	0.13	0.15	0.17	
+PRINCPLE	12300	13776	15429	17280	19354	21676	24277	27191	30453	34108	
-DEPRCN	-407778	-407778	-407778	-407778	-407778	-407778	-407778	-407778	-407778	-407778	
TAXABLE INCOME	-303354	-267070	-227915	-185655	-140034	-90774	-37574	19893	81982	149081	
TAX SAV/ (COST)	151677	133535	113958	92828	70017	45387	18787	-9946	-40991	-74541	
AFTER TAX CASH FLOW	243801	260467	278392	297670	318407	340715	364713	390534	418316	448211	
AFTER TAX RETURN	0.08	0.08	0.09	0.09	0.10	0.11	0.12	0.12	0.13	0.14	

SELLING PRICE DETERMINED BY CAPITALIZING THE 11YEAR NOI@ 0.10

ORIGINAL LOAN AMT	2968303	EQUITY REQUIRED	3148364	ORD INC TAX RATE	0.50
GROSS SALES PRICE	9596828	LOAN AMT DUE	2752460	CAP GAIN TAX RATE	0.20
DEPRECIATED BASIS	2038889	SELLING EXPENSES	575810	LENDER'S SHARE #	0
TAXABLE GAIN	6982129	TAX DUE ON SALE	1396426	AFTER TAX GAIN FROM SALE	4872132
BEFORE TAX GAIN	6268558				

EQUITY RQ -3148364 A/T CASH FLOW	243801	260467	278392	297670	318407	340715	364713	390534	418316	5320343

INVESTOR'S AFTER TAX INTERNAL RATE OF RETURN 12.9%

TABLE 5

FACULTY HOUSING

HIGH-RISE CONDOMINIUM INCLUDING RETAIL

AFFORDABILITY ANALYSIS

MIX		
RESIDENTIAL UNITS	60	
PARKING AREA	20000	
RETAIL SPACE	5000	
AVERAGE UNIT SIZE	800	SQUARE FEET
PARCEL SIZE	10000	SQUARE FEET
BUILDING EFFICIENCY RATIO	0.90	
LAND PRICE/Sq.Ft.	0.00	
LAND COST/ACRE	0	
UNITS PER ACRE	261	

DEVELOPMENT COSTS(PER S.F.)

PARKING	25.00
RETAIL	78.00
HOUSING	98.00

RETAIL INCOME/SF $ 1.50/MO NNN
OR $ 90000/YEAR

TOTAL DEVELOPMENT COSTS:

PARKING	500000
RETAIL	390000
HOUSING	5226667
TOTAL	6116667
DEVELOPMENT COST PER HOUSING UNIT	101944
LAND	0
DIRECT	101944
20% PROFIT	20389
TOTAL DEVELOPMENT COST PER UNIT	122333
VALUE OF RETAIL AS COMMERCIAL CONDO @ 0.10 CAP RATE	900000
INCOME FROM SALE OF RETAIL SPACE (PER UNIT)	15000

FINANCING:

INTEREST RATE	12% PER YR
TERM	30 YEARS

CONDO FEES, TAXES & INSURANCE/UNIT 1500 PER YEAR
(PARKING FEES COVER PARKING EXPENSES

HOUSING EXPENSES AS PERCENT OF INCOME	0.33
SELLING PRICE OF EACH HOUSING UNIT EQUALS DEVELOPMENT COST PER UNIT LESS INCOME FROM SALE OF RETAIL SPACE =	107333
LESS DOWNPAYMENT @ 10%	-10733
EQUALS LOAN AMOUNT	96600
ANNUAL MORTGAGE PAYMENT	11992
PLUS EXPENSES	1500
EQUALS HOUSING COSTS OF	$ 13492 PER YEAR
OR	$ 1124/ MONTH
INDICATES ANNUAL HOUSEHOLD INCOME	40886

PARKING RETURN ANALYSIS

GROSS SCHEDULED INCOME		$ 98.00/SPACE/MO
LESS VACANCY AT 3%		$ -2.94/SPACE/MO
LESS EXPENSES AT 10%		$ -9.80/SPACE/MO
NET OPERATING INCOME		$ 85.26/SPACE/MO
DEBT COVERAGE RATIO	1.25	
DEBT SERVICE		$ -68.21/SPACE/MO
INTEREST RATE	12%	
TERM	30 YEARS	
RETURN TO EQUITY		$ 17.05/SPACE/MO

DEVELOPMENT COST PER SF (EXCL LAND)	25.00
DEVELOPMENT COST/SPACE @ 350 SF/SPACE	8750
LESS LOAN AMOUNT	$ -6631
EQUITY REQUIRED	$ 2119
BEFORE TAX RETURN ON EQUITY	0.10
NET INCOME/YEAR	1023
DEPRECIATION (STRAIGHT LINE 15 YEARS)	-583
1ST YEAR INTEREST	-796
1ST YR TAXABLE INC	-356
TAX SAVINGS ON OTHER INCOME @ 0.50 TAX BRACKET	178/YEAR
AFTER TAX RETURN ON EQUITY	0.18

APPENDIX C: WEST SIDE STUDY PUBLIC PARTICIPATION PROCESS

CHRONOLOGY OF EVENTS LEADING UP TO WEST SIDE STUDY

JANUARY 1980. A campus Housing Task Force, developing recommendations for new student and faculty housing, recommends a study of university property and other underdeveloped property along Oxford Street between Virginia and Durant for possible housing and other uses, including public and private uses, with plans to be acceptable to the city, the university, and groups interested in downtown Berkeley.

JUNE 1980. City and campus staff discuss how to involve the city in a possible study of the west side area and the relationship of such a study to the planning effort being undertaken by the city for the downtown.

JULY 1980. Berkeley campus Administration and Systemwide Administration agree to jointly fund and to do study of west side.

DECEMBER 1980. City staff provide specific input to contents of a Request for Proposals (RFP) from consultants for a West Side Study.

FEBRUARY 1981. Letter from campus to City Council, Planning Commission, and other groups interested in downtown, including copy of RFP, map of study area, and list of potential consultant firms. Letter states that the university expects to involve city staff, City commissions, and City Council to assure that city's needs and policies are considered.

APRIL 1981. City of Berkeley urban design planner participants in process to select West Side Study consultant. City Council discusses February letter from campus regarding study. Only action by Council is to ask City Manager for information about the use of the Oxford Tract and about university leases of private property.

MAY 1981. Letter from campus to City Council enclosing another copy of the RFP plus the accepted proposal from firm of Sedway/Cooke. Letter states plan to coordinate with city study of downtown and with the Downtown Citizens Review Committee which is working on city issues regarding the downtown under the leadership of the City Planning Commission.

JULY 1981. City Manager recommends that City Council assign responsibility for city liaison with the university in the West Side Study to Downtown Citizens Review Committee.

SEPTEMBER 1981. City Council designates Downtown Citizens Review Committee as the liaison for the city in the West Side Study.

University establishes a Study Advisory Committee (SAC) for the West Side Study. Committee includes: all members of the Downtown Citizens Review Committee, representatives of the Council of Neighborhood Associations, Berkeley Architectural Heritage Association, Chamber of Commerce, Downtown Business Association, Urban Ecology, ASUC, League of Women Voters, Gray Panthers, neighborhood associations close to campus; several city staff; members of City Commissions, including Transportation, Planning, and Landmarks; downtown business persons; representatives of the Board of Realtors; representatives of the Berkeley campus of the university and Systemwide Administration. More than 60 people initially invited to serve.

OCTOBER 1981. Vice Chancellor sends letter to City Council informing Council of first meeting of SAC and sending copies of those invited to serve, a summary of the program for the study, and a copy of the proposal from the consultant. Council is asked to designate one or more Councilmembers and anyone else Council would like to serve.

NOVEMBER 1981. Four members of the City Council volunteer to serve on the West Side Study Advisory Committee: Denton, Fukson, Sweeney, and Washburn.

MEETINGS HELD AS PART OF WEST SIDE STUDY PROCESS

A total of nine meetings were held by the consultants to provide information and to receive information, ideas, and viewpoints about the west side area. Three of these meetings were for the Study Advisory Committee only; six of the meetings were public meetings. More than 60 persons were invited to each of the Study Advisory Committee meetings. The public meetings were publicized via ads in the Berkeley Gazette and the Daily Californian and press releases issued by the Campus Public Information Office, and via a mailing list of property owners, community leaders, representatives of many community groups, and any other interested persons. Signup sheets were available at meetings, asking for names of other persons who might be interested in the study who would be added to the list. The mailing list for these public meetings included names of about 1,000 persons. Information was also distributed by hand to businesses in the area.

The meetings generally involved a questionnaire or use of a map on which participants could record their ideas. Several of the meetings used a small group format with a discussion leader to facilitate receiving information. Representatives of city and community groups served as facilitators at some of these meetings.

The meeting schedule included the following:

October 26, 1981:	Study Advisory Committee meeting. Small group work with maps to identify key issues and with **questionnaires** to obtain individual views.
November 23, 1981:	Study Advisory Committee meeting; presentation of some preliminary data.
January 18, 1982:	**Public meeting;** presentation orally and in writing of major background data; distribution of **questionnaire; background data made available** to any interested person.
March 8, 1982:	Study Advisory Committee meeting; review and advice on range of alternatives and development of criteria for assessment; **questionnaire.**
April 19, 1982:	**Public meeting;** presentation of possible alternative concepts for development of the study area and the more general downtown area, and alternatives for sub-areas within the study area. Assessment by public of alternatives, including financial, traffic, urban design, social, community issues and objectives. **Questionnaire;** paper assessing initial alternatives and initial financial assessment distributed. **Paper made available to any interested person.**

May 19, 1982:	**Public meeting;** small group work sessions to respond to composite alternatives for land use, scale of development, circulation. **Use of maps** to obtain information from members of groups which were led by community persons.
June 17, 1982:	**Public meeting;** small group workshops; **questionnare.**
November 22, 1982:	**Public meeting;** presentation of findings of **Draft Final Report** by consultant and questions and answers regarding report. **(Copies of report made available in advance of meeting to interested persons.)**
December 9, 1982:	Public meeting; small group workshops conducted by community persons, with **questionnaire** which outlined all of major recommendations of the report.

OTHER PRESENTATIONS ABOUT THE WEST SIDE STUDY

In order to bring information about the study to city and community groups at their meetings, presentations were made as follows:

June 2, 1982	Presentation to City Planning Commission;
June 10, 1982	Presentation to the City Manager;
June 18, 1982	Presentation to City Council Economic Development Sub-Committee
June 23, 1982	Presentation to members of several City Boards and Commissions invited by Planning Commission;
July 23, 1982	Presentation to Senior Citizens Groups;
November 5, 1982	Presentation to League of Women Voters.

FUTURE PLANS AND PROCEDURES REGARDING THE STUDY

Copies of the final report from the consultant will be made available to all persons who have served on the Advisory Committee, to members of the City Council and City Planning Commission, and to any interested person requesting a copy. All of the materials prepared by the consultant during the course of the study will also be available.

As the consultant's final report represents recommendations from the consultant to the university, not the position of the university, the Berkeley campus and Systemwide Administration of the university will be preparing their responses to the consultant's proposals after they are reviewed. The university responses will not be a definitive plan for action by the university but will be in the form of university comments on, and attitudes toward the recommendations of the consultant. These can then provide the basis for further discussions with the city and other interested groups and individuals.

LAND USE RECOMMENDATIONS

The following comments are public responses to specific land use issues recommendations analyzed as part of the West Side Study. The questionnaire was handed out at a Public Meeting on November 22, 1982 held at the North Berkeley Senior Center. Responses were completed at the Group Workshop held in December or mailed directly into the University. The issues/recommendations are listed first with the total number of people who agree, disagree, or have no opinion on the specific recommendation listed to the immediate right. General public comments to the recommendation follow.

MAIN CAMPUS LAND USE

	AGREE	DISAGREE	NO OPINION
	36	7	1

1. The main campus should continue to be reserved for academic or direct administrative support to academic functions. The open space resources are too important to both the campus and to the city and potential opportunities for the long-term additions to space needs too limited to be allocated to uses that can be accommodated off campus.

- Definitions of academic and direct administration?
- Why does area wide administration have to be in Berkeley?
- Yes, the more University uses (research, faculty housing, etc.) that are placed in downtown, the more interesting the core becomes.
- Disagree that all open space on campus should be a sacred cow. Agree with first sentence.
- I'm very hesitant to accommodate much U.C. use off-campus.
- Stay no campus--keeps sprawling without need--modernize campus.
- It's a beautiful campus, leave it be as much as possible.
- The Institution should limit itself to the space it now occupies and/or owns.
- But I'm concerned that this will encourage more university spillover into adjoining areas.
- None of the above. Compromises must be made. Open spaces that add beauty to campus or city need saving. Other open spaces are available for building uses.
- Clarify sentence.
- But in no way should campus proper be expanded, i.e., west to Shattuck. Controlled and limited land acquisition essential.

- Mixed use structures incorporating housing should be considered--see Urban Ecology position paper on West Side Study March 1982 for proposed structure in northwest quadrant of campus.

- Landscape openness is essential for the university. Too many buildings would destroy, both in relation to campus and downtown retail area. If a hotel is built it should face an open campus.

	AGREE	DISAGREE	NO OPINION
	31	5	2

2. The Northwest precinct should accommodate additional academic structures. These structures should support an increasing concentration of activity within close walking distance of the key development opportunities off campus. Complementary functions to the academic ones limited on campus, for example, private research space and retail support, should strengthen the connection between campus and downtown at this critical corner of the campus.

- Where?

- I support heavy utilization of this corner, since it is near a BART station. I also support housing near this corner to further reduce reliance on autos.

- South campus is a blight on the community due to UC extending itself into Berkeley.

- Yes to first sentence, though really up to university; for the rest, I'd want to know more specifically what is planned.

- Absolute necessity for structures must be shown.

- Not clear. Clarify sentence!

- Additional academic structures in Northwest precinct should be for undergraduate teaching purposes only.

- I like the idea of giving an identity to this corner of campus and creating a small campus-oriented retail section nearby . . . incorporating University Garage? Change "should" to "could."

- Yes, there's a lot of badly used space at that corner both on and off campus.

- Avoid "wall" along Hearst. Set buildings back from Oxford and keep landscaping. Public Health Building is a major problem in achieving "strengthening of link". This is a very long term concept.

- Properly planned with open space, height limits, underground parking, and landscaping.

- See statement regarding Urban Ecology in question 1.

- Agree, if not too excessive. They could increase foot traffic for retail shops in secondary shopping center. If academic is synchronized with office space for research, the nearness would be an advantage. Also the northwest corner of campus now lends itself to research. Should promote long term leases.

	AGREE	DISAGREE	NO OPINION
	27	10	4

3. Campanile Way should be formally extended to Oxford Street and future building sites reserved along its southern edge. In this way, the primary pedestrian route between downtown and the campus can be given the design emphasis suitable to a major entrance to campus and increase personal safety by providing activity centers adjacent to the pedestrian path.

- The alignment does not quite work, because the end at Oxford would not be at an intersection. Entry should be directly opposite Center Street.

- The aim is good--but Campanile Way is not appropriate. The "formal" part of Campanile Way should end.

- Excellent recommendation!

- Preserve environmental quality of path, creek, trees.

- Only if academic buildings are built on the site. But then how long would the Eucalyptus and Oak Groves remain undeveloped?

- Yes, but creekside path should also be kept. Also, car use on the campus should be curtailed.

- University Hall should be removed from downtown and the parking garage removed to allow for student housing.

- "Future building sites reserved" means what?

- Highest priority: must maintain the integrity of the open space on adjacent north edge of Campanile Way. Campanile Way should not intrude on this open space to accommodate buildings on its south side.

- This rural entrance is one of the campus' best features. "Upgrading" this entrance, or constructing buildings close-by, would destroy its character.

- Sounds too slick and formal; what becomes of the utilitarian functions there now, the service entrance, the motorcycle parking, the track stadium?

- Easier to achieve.

- Possibly, but not necessary to develop such a formal axis.

- There is a footpath now from the Dwinelle parking lot to Oxford Street, so no additional path is necessary. This path has been omitted in Figure 11.

- The "slow streets" proposal by Urban Ecology to create streets more hospitable to bicycles and other slower vehicles includes making Center Street a link from the Milvia Street slow street to campus.

- Should have a bike path along Campanile Way. East-west diagonal traffic would save time to upper southeast campus--College Avenue and Telegraph or Moffit Library.

	AGREE	DISAGREE	NO OPINION
	40	2	2

4. The Crescent and West gate to campus should be retained as a permanent open space. This important visual and recreational resource provides a distinct image and definition of the campus edge, provides visual contrast with the academic precincts and urbanized edge of the downtown and carries important meaning in the history of development of the campus. Any alterations to this zone should retain the continous open space and respect the formal elements of the Beaux-Arts Plan.

- Beaux-Arts Plan has been badly bastardized and should be abandoned in favor of Picturesque treatment with less grandeur, more pedestrian scale.

- However, potential for cultural uses at West End of campus should be studied, such as small open air theater for music groups, dance, theater--Berkeley Shakespeare festival could operate there rather than in John Hinckel Park.

- Desire a more visible entrance similar to Sather Gate area. Open space/landscaping could be reduced.

- Keep crescent open, but buildings near it (to show this is the campus), and perhaps restore crescent to its original Beaux-Arts proportion (before Oxford widening).

- The only contribution UC has made to the residents of Berkeley is the open space. UC for me is just a beautiful central park.

- Leave this area as is. No underground parking.

- Cultural use of the Crescent and West Gate should be planned which doesn't require any construction: e.g., music, drama performances, art exhibits.

- Somebody suggested a floral clock or Cal emblem.

- Very important to include pedestrian access.

- Agree, but essential for parking is the nearness to primary retail. You can't have a hotel on Oxford looking down on cars. Roof necessary with grass--thus original looks retained. The upslope of land lends itself to a number of floors in back.

	AGREE	DISAGREE	NO OPINION
	35	4	4

5. The Athletic facilities at the southwest corner of the campus should be retained. The existing concentration of facilities as well as the intramural facility presently under construction provide an important focus of activity and are compatible with the objectives of increasing housing opportunities for students in the West Side Study Area.

- Push for lumping cultural activities to this end of campus--such as open air theater, museum of University History, possibly jointly with Musuem of History of City of Berkeley.
- Agree in general.
- Playing field could be moved elsewhere.
- Student housing only increased in south side of study area--it would blight north side.
- All of these structures should be demolished and student housing constructed. The intramural facilities are nothing more than a cover for a parking garage.
- This area is like a walled preserve! Some way it should be opened up.
- This seems inconsistent with Campanile Way plan (question 3 above, figures 11 and 12) and "breaking the barrier to pedestrian access."
- This is poor land use. Athletic areas could be remote. Better use could be made, i.e., for academic and some administrative space.
- Do something with the ugly wall--open it up in places. Trees in front (or street side.)

CITY LAND USE AND LAND USE INTENSITY

	AGREE	DISAGREE	NO OPINION
	35	3	2

1. Major city and regional serving retail should be limited to the core area. A retail/commercial core should be identified in which any proposed developments should be evaluated for their effect on the primarily pedestrian nature of a concentrated retail center distinct from the neighborhood retail areas in Berkeley. The retail/commercial core should recognize the large potential of existing underutilized retail frontage and the limited, though strong demand for future retail growth.

- Absolutely! Berkeley's been irresponsible in letting neighborhood centers lose local need while downtown stagnates.
- There's enough retail now.
- Retail growth should not restrict university expansion.
- The omission of a policy on office use weakens this section.
- Where is that underutilized retail frontage? The lots necessary for parking? These lots were created 25 years ago by the destruction of then existing buildings.
- Primarily pedestrian nature of core, but need adequate motorized access to core: parking and good (frequent and close) transit.
- Tone down scope and extent. Unclear.
- Confusing statement. Some neighborhood commercial areas also attract regional traffic, e.g., Telegraph Avenue. Commercial core should also accomodate residential use on upper floors.
- Does this mean no non-retail uses?
- Does this mean more density--don't know the inferences here.
- The commercial core should not primarily be pedestrian.
- Agree, especially in downtown Berkeley. The FAR is very low--1.5--and if changed upward to average at least 3.0 in ofice and retail usage, there would be a steady increase in office and retail usage. But the right balance is extremely important. Also, types of business in retail structure. Rents must not be too high. And the U.C. should obtain research in a high number for office space.

	AGREE	DISAGREE	NO OPINION
	41	1	1

2. In complementary commercial/residential zones bordering the core, provisions should be made to allow for commercial and residential uses which complement the function of the core. Mechanisms that encourage the integration of housing with commercial developments should be pursued.

- Commercial includes retail and offices.
- Very much agree. The core should be like European downtowns, full of life 24 hours a day.
- Leave things alone.
- Strongest agreement with this concept.

- As exists already?
- Don't worry about it being upper income housing. That's the only kind that's economically feasible, and eventually will trickle down.
- Isn't this how things naturally happen?
- What sort of mechanisms?
- Agree, but who is going to control the integration? It's great to have these ideas.

	AGREE	DISAGREE	NO OPINION
	39	1	2

3. The existing residential neighborhoods be protected from the adverse effects of increased traffic, or adjacent incompatible uses or projects out of scale with the existing street-scale context.

- What else is new?
- Neighborhoods mush change--but scale should be considered in overall city limitations--height, bulk.
- How?
- There is a limit to the degree of "protection" that can be expected by neighborhoods that are very near the core area.
- Depends upon how this is accomplished.
- Traffic should be reduced by providing less parking. Parking in residential neighborhoods should be controlled by preferential parking programs.

	AGREE	DISAGREE	NO OPINION
	26	7	10

4. The Neighborhood Retail development along Shattuck should be separated from the downtown retail core with an intervening area of residential development. Encouraging residential infill in this intervening zone recognizes the major existing residential structures, including the recently completed three story residential complex at the corner of Shattuck Avenue and Delaware Street and responds to the objectives of concentrating retail frontage in the downtown in a compact, pedestrian oriented core.

- This is especially important.

- By all means, but this should be of range of income/ethnic groups to reflect Berkeley's rich diversity.
- Leave alone.
- Prefer to see a mix of commercial/residential rather than setting distinct boundaries.
- But where are those residential sites?
- Shattuck can be business from Rose to Ashby as far as I'm concerned.
- Yes, but I'd like to see local service retail, such as coffee shop, dry cleaner, shoe repair, drug store, etc., on the ground floor of multi-story residential.
- North Shattuck?
- Wise but probably not too realistic.
- Retain some single-family dwellings.
- This area is currently a mixture of residential and commercial and should be allowed to change naturally.
- Intervening mixed-use area, as exists now.
- Is there a realistic objective? There are businesses that seem to belong on the edges of or outside the pedestrian core.
- There are many ways to achieve this, including some residential over commercial in a compatible fashion and provision of parking, arcades, landscaping, etc.
- Retail frontage cannot be pedestrian. Business depends on people getting there by car and being able to park.
- Some activity use at street level seems appropriate--it could be a use related to the housing.
- The North Shattuck shopping area is in trouble due to excessive high rents, brought on by new developers. This area should be studied to gain information so the same does not happen downtown.

	AGREE	DISAGREE	NO OPINION
5. Modify the existing controls on land use intensity by requiring a minimum building intensity and establishing criteria for permitting the conditionally approved higher limit.	23	13	4

- Suggest add this subject to OBJECTIVES p. I-2 under Land Use and Urban design.
- Provide framework for cultural (public and private) facilities reflecting the broad cross-section of Berkeley's diverse socio/economic groups--museums, theater, dance, music, art, sculptural, as well as cultural resources of University.
- Its intensity is high enough now.
- Agree a minimum is necessary but believe FAR of 3.0 is too high.
- No minimum requirements--this leads to homogenization and limits property rights unnecessary.
- Why require any minimum building intensity?
- 2 floors is too low but 5 floors is maximum.
- Minimum FAR of 2 to 2 1/2 in core. As of right now FAR of 4 in core. Variances possible if spelled out clearly.
- May be in a limited sector only. Applies to what sector?
- Not very clear how this fits with walkways like Trumpetvine.
- Criteria should be very tight for permitting extra height.
- There should be a maximum, but no minimum.
- Land use planning should provide for more cultural uses in the Central Business District.
- Shouldn't the market take care of a minimum requirement, if the demand is really there?
- This is possible if there is a professional reviewing board and things don't get out of hand.
- Buildings should not be too high.
- If the economic conditions didn't allow for the specified minimum intensity, this would result in stagnating development. Some minimum intensity may be useful, but it must be very carefully set.
- A higher FAR is required if your survey is correct. If I was Mayor I would desire a separate survey.

SPECIFIC ROADWAY IMPLICATIONS

	AGREE	DISAGREE	NO OPINION
	26	11	2

1. Reconfigure the curbs and sidewalks along Shattuck Avenue between Center Street and University Avenue to permit two free moving lanes in each direction and a left-hand turn pocket at University. Eliminate the short-term street parking to avoid conflicts with through traffic. Permit deliveries only at designated off-peak hours.

- Heavy traffic without the buffer of a lane of parking would make sidewalks here a no-man's land. Parking restriction would be difficult to enforce and delivery restriction would impose a hardship on merchants along this frontage.

- Excellent except for last sentence. Wonderful idea ! How do you convince the distributors and the teamsters driving the delivery trucks that they should make deliveries earlier than noon? I've been trying for many years.

- This is the most difficult intersection in the area for pedestrians--as it now functions.

- In principle--excellent--but could be tight. Need to study carefully. Also, trees would have to be removed. Urge they be replaced and number increased.

- Parking in this area is already at too low a level to support existing retail trade.

- Agree that traffic flow needs to be improved here.

- OK, if Shattuck Square is made into a transit mall.

- Limit short term parking, not eliminate, i.e., no parking 4-6 p.m.

- Agree with reconfiguring curbs and sidewalks.

- Street parking is in too short supply to eliminate much. The major need instead is for community acceptance of parking enforcement, especially in bus and loading zones.

- Yes, on permit deliveries only at designated off-peak hours.

- Is this the product of "coke" or "grass?" The downtown merchants will go broke.

- Not sure--suggest trying it first before permanently fixing it in place.

- Sounds intersting, but how will north bound Shattuck busses cross university? How/where will you replace parking removed from Shattuck? Don't widen sidewalks on Shattuck Square.

- Both directions should be on the west half of Shattuck Avenue.

- Whole scheme need further study. Unanswered questions on replacment parking, design of intersections, adequacy of two lanes to carry traffic, etc.

- This is a dreadful intersection (really series of intersections) and this sounds like an improvement. But needs careful evaluation of consequences elsewhere.

- Needs more study.

- Deliveries cannot be designated to off-peak hours. Different delivery trucks have their own schedule.

- The best traffic patterns too complicated for most of us to deal with.

- But . . . do not eliminate short-term parking on the street.

- Questions 1 and 2 seem garbled, in relation to the maps. Short-term street parking should be retained--people need it to shop, and it's a mark of a downtown.

- Shattuck Avenue is the main shopping street and should not be made a main thoroughfare. If anything, more parking should be provided--or better inner transportation.

- If you eliminate parking you need to provide additional space nearby.

	AGREE	DISAGREE	NO OPINION
	21	14	3

2. Reconfigure the curbs and sidewalks along Shattuck Square between Center Street and University Avenue to permit two way traffic. Permit northbound traffic from Shattuck to utilize Shattuck Square to make right-hand turns onto University Avenue going east.

- Relates to Question 1.

- Excellent idea!

- Agree that traffic flow needs to be improved here.

- These changes eliminate and create problem intersections.

- Not sure--must have a model built with peak traffic controls to see if it is effective.

- Two-way bus traffic? And bus station? Too much congestion, noise, fumes, etc.

- This is a dreadful intersection (really series of intersections) and this sounds like an improvement. But needs careful evaluation of consequences elsewhere.

- No! Northbound bus mall only; No right-hand on University. Buses go north on Shattuck and east on Hearst.

- Two lanes in each direction are necessary.
- With Shattuck so close by, it would be more appropriate for Shattuck Square to become a pedestrian mall--possibly with bike and transit access.

AGREE	DISAGREE	NO OPINION
23	11	5

3. Close Addison Street between Shattuck Avunue and Shattuck Square to traffic and incorporate the right-of-way into a pedestrian plaza.

- This is not a focal point.
- Excellent idea!
- Excellent, should provide plaza for outdoor cultural activities--sculpture, music, dance, art vendors. Need more than this <u>one</u> plaza.
- Nonsense.
- This is a vexatious intersection to cross.
- Closure of any streets equals drug pushers, street people sanctuaries.
- Not much gained by doing this.
- I'm less sure about this change (especially its consequences).
- It has not worked in other cities, i.e., Sacramento, Fresno.
- Good!
- Would deaden that area.
- Why so little space for this important idea? Would need to see whole transportation system and connections.
- No need for this.

AGREE	DISAGREE	NO OPINION
17	22	0

4. Widen sidewalks where indicated along Oxford Street to reduce crossing distance for pedestrians at intersections. Visually constrict the right-of-way to reduce the scale of the street and thereby encourage slower speeds.

- Yes, yes, yes.
- Crossing Oxford at Addison is always a hazard for pedestrians.
- Excellent.

- Trees!
- There is a strong positive side to smooth and expeditious traffic flow on Oxford.
- Yes to "widen sidewalks . . .," no to "visually constrict . . ."
- At the same time "develop" Oxford with new offices and/or a hotel?
- Will need wider street to accommodate more cars which will come from the growth. Underground pedestrians from BART to crescent. Close passage way at 10 p.m.
- This would add to congestion along Shattuck, to achieve a goal that doesn't seem to warrant such a change (i.e., reducing crossing time). Cutting speed is desirable but not by increased congestion on Oxford as well as Shattuck.
- Underground Oxford Street would make more sense.
- I see no problem with Oxford St. as it is, either as a pedestrian or a motorist.
- Underground Oxford from Hearst to Durant and raise creek above and expose it. Pedestrian plaza at street level.
- Oxford, as is, serves a function.
- We need some wide fast streets: the sooner the cars get where they're going the less they'll congest.
- Don't know effects of this.
- Streets should not be narrowed. Pedestrians manage to cross now.
- Unclear whether proposal replaces parking or traffic lane. Prefer street narrowing that reduces traffic lanes to one in each direction.

	AGREE	DISAGREE	NO OPINION
	22	16	1

5. Establish a coordinated program for selective sidewalk widening along the pedestrian priority streets as indicated in Figure Six to improve the street scale pedestrian amenities and discourage through automobile traffic.

- Yes! Yes! Yes!
- Right on. Berkeley core has great opportunity to be a rich blend of pedestrian activities.
- Improve safety for pedestrians, especially at night.
- More studies and choices needed. We must avoid hurting downtwon business.

- And put more traffic on the "main" streets. Center Street sidewalks are spacious.

- Cars are here to stay, damn it, provide parking for them.

- Bicycle use/encouragement has not been addressed. Both for downtown core area and university.

- Widening is OK on the local street side. Major and collector streets are needed for circulation.

- I would agree to do this for Addison between Shattuck and Oxford, and at intersections along Oxford. Need not establish for others.

- Sidewalks are currently wide enough. Do not discourage through auto traffic.

- Sidewalk widening is silly--pedestrians are pretty lost on wide Center Street sidewalk already. There's nothing for pedestrians on one side of Center Street and both sides of your other two pedestrian priority streets in Figure 6.

- Don't know effects of this.

- Sidewalks are wide enough (unless you would like people to have space to camp there).

- Except south side of University should be widened--the sidewalk from Shattuck to Oxford. The landscaped islands could be narrowed to take care of autos in this short area.

	AGREE	DISAGREE	NO OPINION
	16	15	6

1. Establish a two-way transit mall along Shattuck Square and along Center Street between Shattuck and Oxford. Reroute the south-bound Shattuck Avenue buses onto Shattuck Square.

- Turns required of south bound bus too difficult; better to not have the bus stop in the 2 block skinny stretch.

- Yes! Yes! Yes!

- Great idea!

- What's a transit mall?

- Bus stops were moved from Shattuck and University when BART opened.

- Not sure for same reasons as above. Need scale model to see it work.

- No for Center.

- Concentration of buses will make for concentrated pollution. I'm also concerned about buses re-entering traffic flow.

- Mall okay on Shattuck, but doesn't seem necessary on Center.

- One-way north transit mall on Shattuck Square. Southbound buses on Shattuck Avenue, with stops further on Shattuck or west on Center.

- Buses are only segregated out for two blocks and have to be reintegrated at each end--is it worth it?

- Whatever can be done without discouraging patronage to stores.

- Two lanes in each direction are necessary.

	AGREE	DISAGREE	NO OPINION
	35	3	1

2. Encourage the integration of a new BART entrance facility within any new development at the north east corner of Shattuck Avenue and Center Street to provide for the convenient access of BART patrons to the eastern half of the downtown without crossing Shattuck.

- I appreciate the availability of the BART station for safe passage under Shattuck, especially in bad weather.

- Expensive, and shows up in the piece-meal planning of years ago. BART should have been routed through those 2 blocks in the first place.

- Why wasn't this done at the time BART was built?

- Since this will require digging down and crescent underground parking, then connect the two so that people can walk underground. Closing passage at 10 p.m. would restrict crime and street people from moving in to sleep.

- Yes, but who will pay? Will 2 entrances/exits make for greater or worse security?

- Not worth the enormous expense of digging out another BART entrance. Unnecessary.

- Not necessary.

- There are already BART entrances on the east side of Shattuck.

- There's already a BART entrance on east side of Shattuck: maybe existing ones should be better marked or more inviting.

- If money is tight, crossing the street is not that much trouble.

- But I ask are there not plenty of people living west of Shattuck.

Pedestrian Access to Campus	AGREE	DISAGREE	NO OPINION
	20	13	4

1. The diffused organization of pedestrian movement across Oxford Street should be concentrated at two locations to avoid unnecessary conflicts with automobiles and clarify the movement between academic zones and regional transit services.

- Focus on Center Street should work, but Berkeley Way is not so logical.
- Very important to give pedestrian dominance, even more so in future.
- Number (of locations) depends on the nature of development.
- Why two rather than three? . . .
- Haven't noticed this is a problem.
- Should discourage traffic on Oxford Street to encourage pedestrian access to U.C.
- Why bother to "clarify the movement?"
- Several of these Oxford crossings are problems. At Allton and Kittredge--because of speed and lack of view--and at Hearst because of traffic speed and volume.
- Should be more than two locations.
- If this were done, narrowing Oxford would be less necessary.
- Once again, underground Oxford from Hearst to Durant and have pedestrian plaza. Underground garage below the Crescent.
- Not feasible. People will not go 2 blocks out of their way to cross the street.
- I want to cross Oxford wherever I emerge from campus or downtown. If you take out all but two of the crosswalks, I'll still jaywalk.
- Far too impractical and restrictive. Concept in question 4 above would allow (and should allow) more pedestrian access points, especially at University Avenue.
- Don't make people walk too far.
- Pedestrians should be allowed to proceed as they wish.
- Agree, with reservations, because I wonder if just two places is sufficient to bring the traffic into the new business area. Two major libraries are in the center of campus. Thus, Telegraph is major.

AGREE	DISAGREE	NO OPINION
28	6	5

2. The existing barrier to pedestrian access to campus at the southwest corner should be broken to facilitate pedestrian movement between campus and the residential community to the southwest.

- Not particularly important.
- Depends on how.
- A path from nowhere to nowhere. Policing?
- One does not have to walk far out of one's way now. And that wall is quite beautiful. Please leave it alone.
- An overhead walkway.
- Need to show a pleasant and non-disruptive way of doing this. Otherwise, reinforce other connections.
- Broken, yes, but leave Edwards Stadium!
- Don't understand--southwest corner is Edwards Stadium. You cannot walk through it.
- Yes--the "Forbidden City" feel of the southwest corner should be changed.
- The passageway along the eastern edge of Edwards Field Stadium should be open longer. Configuration of Edwards Field, walls, etc. should remain unchanged.
- Probably, but where does this leave the track stadium?
- There is no barrier to access.

AGREE	DISAGREE	NO OPINION
27	4	6

3. At the time of any major modifications to the southern half of the Oxford Tract, a pedestrian path should be incorporated into the site planning to provide a direct connection to Delaware Street. Delaware Street provides the most direct route via a pedestrian priority street to the residential community west of Shattuck Avenue and north of University Avenue.

- Not particularly important--pedestrians have to turn south anyway, so might as well do so at Walnut.

- It doesn't seem appropriate to decide this now.
- Leave as is.
- Not if this would interfere with the construction of major building on this site.
- The issue is the development of the Tract which is to be avoided. A path is innocuous and OK and an irrelevant question.
- With another crossing at Walnut and Hearst? Oxford at Berkeley Way is easier to cross than is Oxford and Hearst. Close off the Oxford crossing from the campus to the Public Health Block and add a mid-block Oxford crossing to the north of Hearst.
- No path necessary (and certainly not a diagonal one!).
- A second level walkway.
- Residents in the tract should have choice of using Hearst or Delaware which are both near the southern half.
- South half of Oxford Tract is right next to Delaware Street--it's shocking to think of construction so dense that there wouldn't be pedestrian access to it.
- But maintain landscaping at northwest corner of campus. This is lost in Figure T6. Why?

	AGREE	DISAGREE	NO OPINION
Pedestrian Movement in the Retail/ Commercial Core	29	9	1

1. The prototype mid-block passages represented by Trumpetvine Plaza and University Walk should be expanded to a continuous network of north-south movement.

- Yes and No--More such interesting spaces would be good, but not necessarily a "network". There could be serious conflicts if pedestrians are encouraged to cross downtown streets at mid-block.
- Excellent. Some of this might be covered--skylighted like the "Passages" in Paris.
- Not as important as an east-west network. In fact it might reduce herded traffic on east-west.
- Too easy target and hiding place for criminals.
- Design to promote safety of walkers.
- Police problems suggest very cautious expansion of such walks.
- What about safety?

- How will this be policed? Sedway/Cooke has no idea of the number of "vagabonds" here with no place to sleep.

- OK if graffiti writers can be curbed absolutely. Have you seen Sather Gate garage? Or the passageway to campus across from the garage connecting Durant Avenue to Bancroft and the campus. It is a filthy disgrace!

- Where possible, and well done (like Trumpetvine, not University Walk) is good idea, but not necessity.

- Should be very selective, and well-designed, maintained, and policed.

- Midblock passages can be attractive like Trumpetvine or bleak and threatening like Durant to Channing. They need careful planning.

- But only where they could occur naturally by making use of existing driveways, alleys, etc.

- Yes, but not if it's precious and forced--part of the fun of mid-block passages is that they're secret and unexpected. East-west alley already exists behind Trumpetvine: why are you only discussing north-south network?

Specific Campus Parking Policies:	AGREE 23	DISAGREE 10	NO OPINION 7

1. Maintain the existing number of parking places on the main campus.

- Reduce car access in favor of transit and shuttle buses.

- Should be reduced with a system to replace for most uses. Present spaces can accommodate many more cars if size is controlled and parking is better managed.

- Reduce and construct peripheral, underground structures or encourage "mass transit" measures (i.e., public transportation, car and van pools).

- Increase parking.

- Decrease available parking and raise rate.

- I would favor the elimination of parking lots in favor of academic or administrative buildings.

- Perhaps the ultimate solution is the conversion of the entire area adjacent to the campus into a parking lot and remove all parking from campus.

- Make parking more accessible to visitors to the campus and citizens in the evening. Continue to promote carpooling, etc.

- Or (preferably) reduce need for on-campus parking.

- No increase in parking.
- With more student housing provided in the neighborhood, the parking requirements will be reduced. Many other students would use other means to get to campus if less parking was provided and there were parking controls in the neighborhoods, thereby reducing traffic, smog, etc. in city.
- Knowing how hard it is to park on campus.

	AGREE	DISAGREE	NO OPINION
	27	12	2

2. Phase-out the existing surface parking in the West Side and provide replacement in new structure parking at designated locations.

- Sure if the funding is around
- Leave as is. Just add structure parking.
- Agree with providing more parking.
- Absurd. Existing surface parking is only a carrier use. What carrier will you substitute. Structure parking is inherently more expensive and more dangerous.
- NO NO NO. Ugly--expensive--unsafe--does away with open space--ugly.
- Who would use them? Moreover, high rise parking structures look like hell.
- Good to get rid of surface parking but possible security problems with structure parking.
- Question cost feasibility. May agree to partial or phased plan.
- I think this is for university community to decide as long as it doesn't increase traffic and demand for off-campus parking.
- Quick access to surface parking will always be needed in addition to new structures.
- Underground?
- Phase-out only if replacement parking provided.
- Some surface parking lots for short-term parking should remain as well as parking on streets.
- Surface lots can be expected to phase themselves out, as building sites; street parking should remain.
- But this will be a thorny problem unless the university is willing to work honestly with the city.

AGREE	DISAGREE	NO OPINION
27	15	1

3. Limit the provision of additional commuter parking to encourage alternative means of transportation.

- That's a negative approach. Make alternate means more attractive rather than punish or reduce amount of alternates. Can't compete, they are no good.
- It's hard enough to park now if one lives in the northwest neighborhood.
- Try giving best housing to students who don't bring cars.
- Encourage car pooling--provide poolers with close-in parking.
- Punitive planning stinks. How long does it take you people to realize that individual decisions en mass are far more efficient <u>to society</u> than central decision making?
- Stop being so unrealistic. Face the truth.
- Yes, but <u>must</u> better protect neighborhoods from campus parkers.
- Probably would not have the desired effect.
- First provide additional alternative means of transportation.
- Alternatives to driving should be encouraged primarily by offering incentives or attractive alternatives rather than only by limiting parking space. More carrots and less sticks.
- <u>No</u> additional commuter parking!
- It won't, it'll encourage commuter parking farther into the neighborhoods. "Alternative transportation" isn't adequate.
- If there is adequate alternate.
- The faculty should have a say on this.
- But what makes you think you can make this work? Control of commuter parking has been tried with little success.

AGREE	DISAGREE	NO OPINION
21	6	11

4. Retain existing standards for student residence parking providing mechanisms to make parking financially feasible.

- Reduce dependence on car.
- If anything, existing standards are too low.

- If you have to expand.
- Assign housing near campus to students without cars. Enforce a "no car" policy through strict penalties.
- Don't know existing standards.
- Discourage student automobiles.
- Don't understand.
- Please--no rent control board for parking places!
- The "providing" seems to be a key element.
- Regulations such as at eastern universities to prohibit first and second year undergrads from possessing cars.
- Alternatives, such as integrating co-op car rental services into housing or student services, should be considered.
- Why did you refuse to answer my questions about present student parking?

AGREE	DISAGREE	NO OPINION
41	1	0

5. Provide for the public use of campus parking structures on weekends and during the evening hours

- Yes, but limited. Campus also has evening demand for parking.
- This is a great asset, especially University Hall parking structure on Addison.
- Especially emphasize Berkeley's cultural activities--not only on campus but in downtown core--for use during weekends.
- To some extent some areas are now full--with only campus use.
- I favor continuing to charge a parking fee at night to non-students and non-faculty.
- Signs aren't clear now and lots go unused in evenings due to fear of tickets--signs should give permission and not just restrain.
- There's no parking problem here at night. But if need be, why not?
- Do that yesterday.
- Need better notification of this policy.
- If it can bring revenue to the University Parking System.

- Yes! Some available now, but only for those who know where to look--and not systematically organized.
- Should read "existing campus parking strucures."
- Campus surface parking too. And church and bank lots. It's stupid to have unused parking.
- Make this easier/more obvious.
- Isn't there now, for concerts and things?
- More parking available will result in more autos traversing streets of Berkeley.

Specfic City Parking Policies

AGREE	DISAGREE	NO OPINION
21	13	5

1. Prohibit parking as a use in the C-2 zone except where specifically designated in an overall parking concept plan.

- Parking as an interim use of land may make sense in some cases--not a problem that merits public action.
- Reduce notion of curb parking in front of each shop needing access.
- Need more parking there. Also keeps traffic from south from entering immediate campus area.
- This means what?
- Only prohibit surface and ground floor parking.
- Desirable but don't know how feasible--maybe needs gradual phasing-in.
- Unclear what this means.
- I think--does it mean "no new parking lots?"
- A small amount of parking for multi-occupant vehicles, delivery vehicles, etc. would be acceptable.
- Agree, but there has to be that overall plan. Only by working with the City can you accomplish this. To place all the parking below Shattuck the land must be bought or owned by the city.

AGREE	DISAGREE	NO OPINION
25	13	1

2. Encourage the removal of existing fragmented surface parking lots from the downtown.

- In favor of more evenly space multi-level parking--or under buildings.

- "Fragmented" lots are better than large structures.
- They're good--leave them--build upper decks.
- They serve a good purpose and are needed especially at night when it is unsafe to walk in and a car must be used.
- It's unrealistic. Buildings were torn down just to create these parking lots.
- But replace short term spaces.
- Through incentives rather than prohibition. Encourage but not mandate.
- They provide quick, easy parking and encourage shoppers to come downtwon for brief shopping trips, which are needed by downtown businesses.
- Let's have parking requirements for downtown land use!
- Some people don't like to use parking garages at night for security reasons. Some surface parking may be more attractive to them.
- These may disappear eventually through new development. Discourage any <u>new</u> surface parking lots.
- No hurry, they'll probably be used up as building sites eventually.
- Not a major issue.
- If parking is not convenient, people will not come downtown to shop or do business.

	AGREE	DISAGREE	NO OPINION
	23	3	8

3. In the absence of a parking requirement for downtown land uses, utilize the existing parking assessment district to distribute the costs of parking among the potential beneficiaries.

- I don't understand the implications.
- Shouldn't be a parking requirement for downtown land uses!
- Couldn't agree more.
- Don't understand this question.
- Prefer cost-effective projects or those started by one or more sponsors.
- I don't know enough about parking assessment districts to agree or disagree.
- Don't understand.

- It isn't existing, is it?
- Potential beneficiaries are the businesses who want customers.
- Long-term commuter parking spaces should be provided for multi-occupant vehicles such as car pools and van pools--reducing traffic, smog and energy use.
- Agree as a possibility. Will the university also be assessed?

AGREE	DISAGREE	NO OPINION
31	3	5

4. At locations where parking reservoirs are deemed appropriate, provide development incentives to integrate public parking accomodations into private projects.

- Absolutely.
- Parking accomodations should not be on an incentive basis--should be required as part of the EIR.
- Require it--no incentive needed.
- Absolutely necessary if on-street parking is to be removed on Berkeley Square, Berkeley Blvd., and Addison (between the two).
- As compatible with pedestrian retail frontage?
- I don't know what is meant by this.
- Agree, but this works both ways--university projects and city.

AGREE	DISAGREE	NO OPINION
33	2	3

5. Sufficient short-term parking spaces should be retained at the designated parking reservoirs to replace the short-term parking lost on the streets by modifications to the circulation pattern, and to provide for the increase in retail space in the downtown.

- Don't eliminate short-term parking on street--just add spaces.
- Retail areas can't survive without parking close by.
- Well, I'd hope so.
- Should say "retained and added."
- Do not favor "losing" too much street parking.
- Only short-term parking in designated reservoirs. Long-term parking should be made available further away, with shuttle buses available.

- But retain existing short-term parking on the street.
- Short-term street parking shouldn't be removed indiscriminately.

RECOMMENDED LONG RANGE OBJECTIVES

OPEN SPACE DEFINITION

	AGREE	DISAGREE	NO OPINION
	20	15	3

1. Continuous Streetwall. Provide for a continuous streetwall to establish a unified relationship between the heights of buildings and the width of the streets they face to minimize the disruption in retail frontage, and to give a more clearly defined form to the street space.

- In general it's a good idea--but not universal.
- Unnecessary.
- Avoid ugly gaps (vacant lot, surface parking) but do not preclude pleasant gaps (set back with landscaping, restaurant terrace).
- Was not clear about these proposals from reading the report.
- No, no. Boring.
- But isn't this what essentially exists?
- Boring. Needs to be site specific.
- Too rigid.
- Perhaps it's just the label, but I prefer diversity to a continuous streetwall (once we get rid of the parking lots).
- Too regimented. What is wrong with "disruptions" (variety) in retail frontage?
- Could be said so much more clearly! Sounds too uniform. "Streetwall" poor choice of word for most of us.
- Absolutely NO! Allow for textural and height differences, as well as intruding mini-plazas, plantings, street seating, etc.
- If this does not mean all buildings are same height. Variations add to the visual interest of downtown. Do not impose continuous streetwall further south than Durant on Shattuck.
- Not too continuous, please--variety is important.

- I have no problem with variety--as long as there are maximum heights.
- This seems esoteric in concept and will not necessarily achieve a more interesting, pleasant street.
- Buildings could be varied and still aesthetic.

	AGREE	DISAGREE	NO OPINION
	25	3	7

2. Landscape Areas and Edges. Provide for the more distinct definition of landscape areas to reinforce the character of different open space resources and heighten the contrast between identifiable landscape communities.

- Important to retain and enhance landmarks elements--trees, groves. Reduce minor competing schrubs and flower beds.
- But I'm not sure what a "landscape community" is.
- Unnecesary, but aesthetically pleasing.
- Was not clear about these proposals from reading the report.
- This means what?
- Unclear where this applies.
- I don't know enough about what this involves to express an opinion. It sounds like things everybody would approve.
- Landscaping is expensive for the city to maintain and should not be added until that is considered and provided for.
- Provide as much planned vegetation as possible.
- Fine in concept, but Crescent Drive lawn is about as formal as you can get. Ornamental flower bed in center of Crescent lawn?
- Sounds possibly forced and malled.
- Don't forget northwest corner of campus!
- Again--esoteric in concept, hard to realize and not necessarily more attractive.
- Not necessary. The Oakland Museum does not have that contrast and the layout is very pretty.

AGREE	DISAGREE	NO OPINION
27	3	4

3. Streetscapes. Use landscape materials, such as street trees, paving, lighting, and street furniture to functionally support the different purposes of the circulation network and to visually reinforce this functional heirarchy.

- Avoid this word (street furniture) without referring to main purpose, i.e. to provide benches, and other street furniture to increase social uses and interaction on open spaces.
- This must mean something--but it's just jargon to me.
- Too much loitering now, as it is.
- Questionnaire for public input should not contain so much "plannerese."
- Was not clear about these proposals from reading the report.
- Do street trees really enhance the landscape? They endure such abuse.
- Who pays? Any higher taxes is my deciding factor.
- More public art is needed.
- Intersections should be kept visually open for light and traffic safety. Trees obstruct traffic controls.
- Something is missing that this paragraph refers to.
- I don't know enough about what this involves to express an opinion--it sounds like things everybody would approve.
- These three statements could be improved and clarified by the use of simple English!
- Yes, more large trees downtown. Elms are more attractive and stately than the tulip trees. Continue formal street landscape of elms on the side streets, also.
- As long as it's not too precious.
- This is a good idea--sometimes, if insisted upon, it can get very expensive, paving, for instance.
- Furniture has no business on the street.
- Plenty of furniture for Senior Citizens. They get tired. They will be walking more if parking is below Shattuck. They cannot drive right up to stores.

AGREE	DISAGREE	NO OPINION
26	7	6

4. Gateways and Entries. Establish the identification of gateways and entries to clarify the heirarchy of pedestrian paths. Gateways identify major concentrations of activity and are used to direct pedestrian traffic to minimize conflicts with automobile traffic. Entries are defined to protect important routes that facilitate the integration of major destinations with the surrounding residential neighborhoods.

- Too formalistic.
- Suggest add an item on establishing increased sidewalks, and small plazas as often as possible furnished with benches, plants, and space for art works and social life.
- Unnecessary.
- Unneeded.
- To what end? Moreover, where is the architect competent enough to design one and the foundry capable of producing it?
- Major concentrations should be visually open for light and air.
- How many are projected for the West Side and where?
- Not sure just what this means, though I like the idea of a well-defined entrance to campus for pedestrians.
- Is this worth the cost--all would have to be built "earth-quake" safe.
- Don't know what is suggested here.
- Encourage and plan more public and private plazas.
- If the Campanile Path "Gateway" is planned, a pathway should be extended east-west midblock between Oxford and Shattuck, opposite the "Gateway" and connecting with Trumpetvine Court and downtown.
- Informality is an important feature of paths.
- But make enough of them or people will make their own.
- NOTE: This ("hierarchy of pedestrian paths") is a silly term--don't speak "planningese" when talking to the public. What does this mean, "system"?
- In all of this transportation system, where is public transit, especially within the Berkeley community?

- Pedestrians know their way without anybody classifying gateways for them.

- Agree, especially if parking units are below Shattuck. Entries should state what retail-offices are covered. Inside if more than one floor signs should direct parkers who are now pedestrians.

BUILDING HEIGHTS AND SETBACKS

	AGREE	DISAGREE	NO OPINION
	34	7	2

1. Residential Neighborhoods. Establish a three story limit in the residential neighborhoods to maintain a consistent height with the existing housing resource.

- Could be 3 over parking.

- 3 story is not form related--set heights.

- This would prevent the addition of more apartment units needed for students.

- May be too high in some areas.

- Maybe 4 story limit.

- Retain current zoning requirements.

- Two to three should be possible.

- Providing student housing near campus is crucial in reducing auto traffic in Berkeley. Therefore, projects higher than three stories may be appropriate, but they should respect the neighborhood scale at their borders, and should respect existing buildings with respect to solar access in winter.

- Two stories better match in Oxford Tract. Again suggest switching present teaching area to back half.

	AGREE	DISAGREE	NO OPINION
	27	8	3

2. Retail/Commercial Core. Establish a three story limit in specified areas within the retail/commercial core to achieve the objectives.

- Not clear.

- 3 story is ok when that is the design--not as universal as this sounds.

- "the objectives?"

- 5 or 6 stories. No more though.

- Which "specified areas?" Which "objectives?" Incompatible with objective of increased density.
- Should be 5 stories.
- Perhaps set-back could apply only to the south sides of the "pedestrian priority" streets.

AGREE	DISAGREE	NO OPINION
31	7	0

3. Major Arterials. Establish a five story limit to reinforce the continuity of the major streetwalls along Shattuck Avenue and University Avenue compatible with the strongly defined segment between Durant and Allston Way on Shattuck Avenue.

- Fully agree. Would add requirement for architectural criteria and review.
- Set a height, not stories. Set an optimum--a goal not a limit.
- OK south of Addison. 3 story limit north of Addison.
- Again, good idea, but decisions need to be site specific, project specific.
- 5-story maximum, right? Solid 5 story streetwall isn't necessary or appealing, we need variety.
- "Streetwall" seems an unattractive term to me and doesn't present a pleasant aspect.
- I would prefer a 3-story limit.
- From Durant to Hearst 4 or 5 stories. Also from Grove to Oxford on University Avenue the same.

AGREE	DISAGREE	NO OPINION
25	15	1

4. 100 Foot Maximum Height. Maintain the maximum 100 foot height limit in the present zoning code but limit its application. Permit a higher structure, up to 140 feet specifically for a hotel/conference facility to be located at one of the designated sites in the policy diagram.

- Could go higher with more specific plan.
- Downzone . . . The higher buildings have all been unfortunate; detract from Berkeley.
- No need for hotel/conference facility.

- I favor eliminating all height limits.
- Trick question. Agree with 100 foot height limit. Disagree with 140 feet for hotel/conference facility.
- But is such a hotel/conference facility economically viable?
- Agree because I have no objection to hotel/convention concept. It would create jobs!
- I don't agree with most of designated sites, and I'm not convinced that a large hotel/conference site belongs in Berkeley.
- Yes for the current 100 foot limit. Exceptions to 140 foot need not be limited to a single one.
- Tall hotel should not be built on Oxford/Kittredge corner.
- 140 foot too high. Will block views.
- 100 foot seems too high--buildings in the model "segment" in the previous question are only 50-60 feet.
- I like the on-campus conference tower site in the policy diagram. Slab tower should run east-west to minimize the shadow north of it.
- But don't specify exact locations. Figure 14 is misleading probably because of options for hotel.
- The question of height limits and other zoning considerations is very complex and cannot be answered offhand by the layman. Many neighborhood hearings will be required to reach final solutions.
- I am against high structures.
- Zoning--only one hotel and state area. Consider 75 foot or 100 foot on Oxford from Durant to Allston Way.

PEDESTRIAN RETAIL RELATIONSHIPS

	AGREE	DISAGREE	NO OPINION
	32	6	0

1. Primary Retail Frontage. Establish a primary retail frontage designation to protect and enhance the retail function of downtown. To achieve this end, uses along the designated frontages should be limited primarily to uses requiring pedestrian access and exposure and close physical proximity to other retail uses. Other commercial uses, which do not have these requirements should be conditionally permitted.

- Definition needs tightening. Hard to specify what is meant by "requiring . . . close physical proximity to other retail uses."

- Suggest change "RETAIL" to "SOCIO-ECONOMIC." Suggest this section be broadened to recognize downtown as a place for all groups of Berkeley have place for social-cultural interaction--or add a separate section; encourage pedestrian access to public, private and semi-private cultural facilities--such as: theaters (now have 2 in downtown, Berkeley Repretory and Shakespeare Festival), museums--small branch of UC museum (store-front), Museum of History of Berkeley, UC History Museum, places available to diverse community groups in Berkeley, to keep core from being elite area serving only certain classes and purely for "Business" purposes.

- Will spoil small city atmosphere and turn Berkeley into an urban monster.

- OK in general but do not exclude uses like offices of a community organization or government offices providing service to the public.

- Prefer a mix.

- Seems to be reasonable.

- Strongly agree.

- Hard to define.

- Have car access to enable short-term parking--often ones needs 10 minutes to 30 minutes.

- Can't understand such a complicated sentence.

- Allow street parking on streets with "primary retail frontage" designation. Shoppers need short-term street parking, and cars parking and driving away contribute to the busy, vital character of a street. A downtown street with little or not vehicular traffic can seem "dead."

- All these planning concepts (questions 1 through 6) are feasible, but I can't picture the entire master plan (having not seen it) and everything is interwoven and related and of a total piece.

- For a retail area to work, people must be able to get there by car and park nearby.

	AGREE	DISAGREE	NO OPINION
	31	2	3

2. Secondary Retail Frontage. Establish a secondary retail frontage designation to enhance the appearance and security of streets serving as major pedestrian routes. Use restrictions should be less limiting than those applied to the primary retail frontage. The major objective is retention of visual interest for the pedestrian by providing display type of

windows along the street, preventing gaps in the building frontage, and avoiding pedestrian conflicts with vehicular movements entering or exiting from properties along the street.

- Ok in general but do not exclude uses like offices of a community organization or government offices providing service to the public.
- Don't understand.
- Seems to be reasonable.
- Agree except for "preventing gaps"--a gap or two might add interest, like a missing tooth!
- More study needed.
- Planned gaps for plazas in the building frontage are ok.
- Shouldn't pedestrian street be the most retail of all?
- But why this obsession with "preventing gaps?" This sounds academic.
- Having a secondary is ok. But having close to University Agriculture is not going to be liked, but housing units if placed in the front half of Oxford tract, the outlook would be superior. The Agriculture area can be moved to back half.

	AGREE	DISAGREE	NO OPINION
	33	2	3

3. Dual Purpose Pedestrian/Vehicular Route. Recognize that Shattuck Avenue and University Avenue will function as both primary retail frontages as well as serve as arterials for automobile traffic. Establish conditions for controlling the character and function of dual purpose streets.

- Open up other major arteries. Accommodate traffic (vehicular and parking better).
- Without street parking downtown--limited as it is--how can Shattuck be a primary retail frontage?
- Sounds good, but wide sidewalks are often dismal. A "too planned" space likewise.
- Curbside parking can be a buffer between pedestrians and street traffic.
- They have that character now.
- All streets have various functions.

AGREE	DISAGREE	NO OPINION
31	4	3

4. Pedestrian Priority Route. Establish pedestrian priority routes that serve to create enclaves of retail activity where pedestrian traffic predominates. Recommended conditions provide for the following:

- I like the reference to more benches.
- Encourages crime--protects criminals with getaway routes.
- Pedestrian ways as interblock pathways.
- Shopping pedestrians and traveling pedestrians are mistakenly handled here as one group.
- Doesn't this simply recognize the status as it is?
- Routes should be selected that have little or no vehicle crossing conflict.
- Reserve benches, etc. for the quieter mid-block passages. Streets should remain busy, noisy, etc.
- Access by car and parking is necessary for business.

AGREE	DISAGREE	NO OPINION
33	4	2

5. Mid-Block Pedestrian Passage. Establish two classes of mid-block passages. Those peripheral to the retail/commercial core or on the main campus should provide convenient pedestrian routes from adjacent residential neighborhoods to the campus. Those within the retail/commmercial core should be integral with the retailing function of the downtown.

- Good enough now, especially with Go-BART service.
- Pedestrian ways as interblock pathways.
- Well and good. But will they be safe? Because of BART and downtown traffic, the streets are relatively safe until relatively late.
- Not necessary as passage. Eating and sunlight good, but must be sensitively done.
- This concept will lead to mid-block accidents except in block of 800 feet to 1000 feet long.
- Should be very selective, not a blanket pattern.

- Feel places like Trumpetvine are working, and would like more like it.

- More of these areas, similar to Trumpetvine Court, would be great! Imcorporate ideas from Section 4 above in these areas.

- Not necessarily--alleys and undeveloped paths to through blocks make the area interesting too.

AGREE	DISAGREE	NO OPINION
28	6	4

6. Retail Nodes. Establish the location to accept concentrated retailing activities supporting, for example, larger comparative shopping facilities, or multi-level retail malls. The opportunities for incorporating larger concentrations of retail activity into the downtown have long been city policy, though integrated design and planning for such functions has been hindered by the market's inability to assemble sufficiently large parcels. The location of larger retail nodes entail particular siting strategies that are cognizant of the marketing requirements of such retail functions, their parking requirements and their potential affect on the streetscape frontage. Figure 15 identifies three possible opportunities for integrating an additional retail node into the downtown. Two of them are characterized as primary opportunities, the third is characterized as secondary because of its distance from the existing retail node represented by Hink's and Penney's.

- Excellent.

- There's enough retail and businesses are presently not doing well.

- University Avenue - Milvia (Golden Bear Ford lot).

- Except for the one secondary node at Berkeley Way and Walnut, isn't this essentially what exists anyway?

- We may be approaching retail saturation, unless there is a mix of small manufacturing, other interesting and cultural facilities, including processes, intermixed.

- In the shown locations, the parking requirements are difficult to accommodate.

- I am not for a retail mall but am for more retail opportunity, first-floor only.

- I would not favor an enclosed mall.

- Given the locations in Figure 15, this sounds pretty mall-like.

- Retail nodes would only work if some well known store(s) could be attracted. So far Berkeley has lost all better stores.

- The Berkeley Way node should not be too intensive as it is adjacent to residential areas.

- We need a second major department store located in one of the primarys to build around. A well known name would be a real help. Parking below Shattuck of course will be important. The city owns are large piece of land on Milvia. The tennis courts. They could be retained for the High School by having the parking under the courts like U.C. has on Haste.

HISTORIC RESOURCE PROTECTION

	AGREE	DISAGREE	NO OPINION
	27	4	4

1. Utilize the "Special Precinct" designation in the retail/commercial core to assure the evaluation of the historic potential of particular structures.

- Don't understand.

- Preserve historical and architecturally beautiful old buildings (also interesting ones).

- Not clear about scope of designation.

- Except for the Public Library, there are few historicallly significant structures downtown.

- Historical context should not be used to block--should be incorporated into adapted reuse program.

- As long as it doesn't prevent business expansion.

- Requires definition. Would add another level of restrictions.

- Really "ambivalent". I don't want everything torn down, but I don't want everything preserved either.

- Structures in Berkeley are all fairly young and not historic in the European, Asian or Egyptian sense.

- Retain only those that will bring people to see them. Make them useful.

- I don't know enough about the various considerations to have an informed opinion.

- I believe more emphasis should be given to this section, as means of playing up Berkeley's uniqueness and identity as expressed in its architectural heritage. Also, this aspect should relate to the issue of downtown as a center for cultural activities of <u>all</u> diverse groups in Berkeley. Historic preservation should not be an <u>elite</u> function, for its own sake.

- This doesn't say anything.
- Especially beautiful or interesting old buildings and structures.
- Yes!
- Our tax base is a significant resource--broaden it.
- These are known and have been used, need to apply existing ways.
- Really "ambivalent." I don't want everything torn down, but I don't want everything preserved either.
- Assess and offer a broad range of development incentives to promote restoration and reuse.
- Make it policy to maintain the unique architectural character of downtown Berkeley so that re-use of existing resources is considered a top priority. Additionally, any new construction must be in harmony with the structures adjacent to it, as well as those across the street from it.
- Another incentive the city should be thinking about is the Historic Building Code.
- Of course.

GENERAL COMMENTS

The following are solicted public comments received from an open questionnaire on the West Side Study:

- Having visited some European cities and seen the car-free pedestrian walks and parks, I am concerned that pedestrians, especially the elderly, will not be comfortable in downtown Berkeley. Are there really enough places for pedestrians to rest, while they are shopping?
- I would like to see housing (especially faculty) on Oxford Tract as well as some other small scale facility for campus related use.
- I think the report is great. I hope decisions are made soon and implemented.
- Have you coordinated your traffic plan with BART's study and plans?
- These suggestions are all well and good but are they realistic? The danger of this plan is that someone may decide to implement it--as was done in the South Campus area. And what occurred? Good intentions do not always produce the desired results. I believe I understand the main intent of the report--after 10 hours of study. It appears to suggest ways of increasing the retail resources of the downtown to maximize the tax base. And ways of solving the problems concomitant with that development. But as explained above are these ways always rational and consistent?

- Most important is that in rearranging traffic patterns through downtown Berkeley, thorough study should take place with models or computers so that good ideas (like Moscone Center) don't become stupid and unworkable.

- In general, the report overemphasizes the economic aspects of development, and does not sufficiently represent the need of the University for space and buildings to conduct its nonincome producing activities, things like instruction, basic research, cultural and general education functions, which, after all, are the main missions of a university. On the city side, the report tends to be coercive rather than encouraging or guiding. I prefer incentives rather than restrictions. With the latter you expect people to submit to supposedly higher authority. With the former you invite them to use their talents and ingenuity to achieve goals that may, simultaneously, be of some profit to them. Overall, I am impressed by the caliber of professional work conducted by Sedway/Cooke, and appreciate their dedication and openness during public meetings. On the question of what market analysis would indicate, there seems to be some stretching of what can be absorbed in downtown.

- Very important to city that no more taxes are lost through additional U.C. land use--property should be returned to tax rolls rather than removed. U.C.-city cooperation in calm, reasonable atmosphere should be sought. Provisions for residential/commercial combined use in center city is important.

- Figure 12--Long Range: No street wall, south side of Campanile Way. Will interfere with views. Do not interfere with NATURAL vegetation around Strawberry Creek, just to the north side of Cross Campus Road.

- I welcome this document as:
  - an effort by U.C. to ascertain and deal with community feeling before changing the landscape;
  - a concrete proposal for the city to react to;
  - a prod to the city to get going on its planning;
  - a reminder to Berkeley residents that we'd better think about the kind of downtown and city we want before it changes out of recognition;
  - a start at coordinating U.C. and city planning.

- For my part, I think I want a vibrant, diverse downtown. Retail, commercial, residential, and within those categories, as much of a mixture as possible. I'd like to see more intensive development downtown rather than an expansion of neighborhood commercial districts. I'd be glad to have a conference center/hotel, as part of the diversity, but not one out of scale for Berkeley.

- I think we need to push for improved public transportation (given little attention in this study). I know such transportation is better here than in much of the Bay Area, and demand has to precede supply, but for me at least a bus every half hour isn't much of an incentive to leave my car at home.

- I don't want U.C. to take any more property off tax rolls. U.C. makes Berkeley the city it is and it's the reason most of us came here in the first place, but at times the cost has been high. Some equitable arrangements, such as in lieu payments, should have been worked out years ago between the state and the cities affected; it's still not too late.

- I am concerned that this study, perhaps because of its inherent limitations, couldn't be more thorough in anticipating the consequences of proposed changes. I've lived long enough--and in enough different cities--to realize that changes often create worse problems than they were intended to solve. The study has made a real effort in this regard, but more consideration is needed.

- The unviersity should make every possible effort to provide more student and faculty housing on land it owns, and should also pursue the opportunities mentioned in the report to undertake developments that return some tax revenue to the city.

- Believe that comprehensive plan should include recommendations to improve public transportation in the city so that there will be less need to drive cars into the center of the city. This also is important to improve business in downtown stores.

- For public meetings believe the language should be more simple. "Words of the profession," e.g., hierarchy of paths, streetwalls, landscape communities, should not be used.

- Figure 2, Susceptibility to Change--"utilization ratio" seems to be largely a function of how recently a building has been sold, not building's actual size or condition. Why is the south half of 100 Berkeley Square underutilized and not the north half?

- The university should also adopt a policy of incorporating state-of-the-art energy efficiency into all new buildings, such as passive and active solar in residential projects and daylighting, solar control, and natural ventilation in commercial projects.

- Please refer to the Urban Ecology position paper on the West Side Study, dated March 8, 1982, for more information on our call for a more ecologically sensitive area plan.

- Thank you for your consideration of these issues, which we feel will have great impact on the quality of life in Berkeley in the future.

- Your questions in most cases, if one would like to have this happen to downtown Berkeley, all tend for one to agree.

- There is nothing about the methods of finance; types A, B, and C. You do not ask the public, the store owners in downtown Berkeley, what they would desire. Yet your survey covers this the most important part of the survey.

- The university has had all the advantages in comparison to the city when we talk about taxes, the life blood to good city government. What method of finance is to be used that will help the city? This is the key question when we talk about cooperation.

- I can't help say this. At the meeting I, as a long time resident, received the impression that despite the talk of wanting to cooperate with the city, the university was throwing out a few bones of cooperation, but still was reverting to the usual line of wanting it their way.

- I want to warn U.C. that the public is very smart. The neighborhood power throughout the city has a strength that can stop you cold. Do not underestimate this power. The points of rallying this power exist.

110 CARLTON ROAD • WATSONVILLE, CALIFORNIA 95076 • 408 • 722-4644

1 December 1982

Mr. Harvey Z. Helfand
Campus Planner, Facilities Management
University of California
2000 Carleton Street
Berkeley CA 94720

Re: West Side Study, Draft Consultant Recommendations

Mr. Helfand:

This office has reviewed Sedway/Cooke's Draft Consultant Recommendations for the West Side Study. We wish to make the following comments.

We whole-heartedly support the major community objectives outlined on page I-1. We would in fact go further, saying it is essential that "removal of land and land improvements from the City tax base" be completely avoided, not just minimized. We also strongly support "producing tax revenues from publicly owned lands." Those elements of the recommendations which seek to accomplish these ends should receive special attention.

On the other hand, we find it difficult to support expansion of either the working or residential population of the City. One look out a window on any given day will demonstrate that Berkeley already has too many people, and will be hard-pressed to support any more. Considering the crowding already apparent, we feel the University should strongly consider the possibility that expansion of its facilities belongs elsewhere, and that increasing both the working and residential densities in the City may ultimately be detrimental to all concerned. While we appreciate the need to better-utilize available land and facilities, it should be recognized that there are limits to growth, particularly in a city among the ten most-densely populous in the United States.

The difficulty of providing more housing in Berkeley is raised frequently in this report. The consultants create a certain amount of confusion by referring to "a demand for market-rate rental housing in Berkeley" (e.g., page II-6). Since the advent of rent control in Berkeley, there is no such thing as "market-rate housing." Rental units in the City rent for far below what comparable units would elsewhere, effectively discouraging development of new rentals. Neither devlopers nor lenders are anxious to become involved in housing projects in Berkeley. The "Initial Financial Assessment" (Appendix B) barely touches on this question, despite its overwhelming impact on the potential for housing development in the City. The most feasible alternative presented in the section on "Student Housing" is still unacceptable, since University subsidies, in whatever form, must be, directly or indirectly, paid by taxes. We feel it would behoove your consultants, and study committee, to consider recommending the repeal of rent control in Berkeley as a means of encouraging private development to meet the demand for housing.

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It is readily apparent that something must be done to alleviate both traffic congestion and inadequate parking facilities in Berkeley. While re-routing traffic in the Oxford/University and Shattuck/University areas, as proposed in Appendix B, is appealing, we must question the reasoning behind the presentation of Option B. The success of this option depends, it seems, on altering human behavior by creating additional congestion in the vicinity of University/Shattuck. We believe that creating more congestion will result in just that, and no improvements. Getting people out of their cars and onto public transit requires more than intentionally creating additional physical inconvenience: e.g., public transit must be efficient, cost-effective, and very convenient; and the price of gasoline must go through the roof.

In addition, certain recommendations in section II assume alterations in human behavior which seem extremely unlikely, judged by current behavior in Berkeley. For example, (page II-18) "perceived scale" has little or nothing to do with encouraging or discouraging vehicle speed; Berkeley's drivers go just as fast as they please, regardless of the "perceived scale" of the street. We also believe that the only way to avoid or diminish conflicts between vehicles and pedestrians is to segregate them. Pedestrians in Berkeley, as a rule, completely ignore traffic signals, and cannot be expected to change their ways simply to accommodate urban planners.

While we recognize the time, thought and study that has gone into these recommendations, we believe that considerable attention must be given to reality in planning for the future.

Sincerely,

W. Frederick Sampson
Berkeley Leasing and Realty

BAY AREA RAPID TRANSIT DISTRICT
800 Madison Street
Oakland, California 94607
Telephone (415) 465-4100

December 7, 1982

Mr. Harvey Helfand
Office of Facilities Management
University of California, Berkeley
Berkeley, CA 94720

Dear Mr. Helfand:

Re: Berkeley Westside Study Questionnaire

BART staff would like to make two comments regarding the Berkeley Westside Study Questionnaire. These comments are in relation to the transit question which encourages the development of a new Berkeley BART station entrance at the northeast corner of Shattuck Avenue and Center Street. First, who would pay for such a facility? Secondly, we would appreciate the opportunity to review all proposals dealing with possible new station entrances in the early planning stages.

We are looking forward to our continued participation in the Westside Study. If you have any questions or need additional information, Katharine Ogden, the BART staff representative to the study, will be available to assist you.

Sincerely,

Barbara A. Neustadter
Manager of Planning

cc: H. L. Goode
K. Ogden

the bay architects

2268 cedar street
berkeley, ca 94709
415 845 0328

JAMES NOVOSEL

December 8, 1982

Harvey Z. Helfand, Campus Planner
Facilities Management
University of California
2000 Carlton Street
Berkeley, Ca 94720

Dear Mr. Helfand,

I am writing you to share my personal thoughts after reading the West Side Study Draft Recommendations of November 22, 1982. I have found that the study's overall ourposes have been well conceived and laudably presented. Your staff and Sedway/Cook should be thanked by both the University and the city for their vision of improving this part of our urban fabric. If growth, both residential, commercial and University related, can occur here, it will further the renaissance of citizen use that has taken place in our downtown over the last ten years.

I especially applaud your pedestrian network section. The idea of mid-block passages modeled after Trumpet Vine Court is superb and quite feasible. Already there exists several old driveways alongside or under buildings that could easily be made into such passageways. If the Trumpet Vine Court concept can be continued linking University Avenue with Durant Street, the bordering properties would economically revitalize and people would gain greater enjoyment in going downtown.

There are two comments that I wish to add that are contrary to your consultants recommendations. First, is the lose of the Oxford Tract. To my mind, this piece of land is like the Chelsea Physic Garden of London. Since 1673 it has been under continual botanical use and is now surrounded by urban life. I think it would be of greater value to future generations that the Oxford Tract's soil be left for research. As California's land continues to become urbanized, what better place is there to study the effects of this on our soils than in the middle of Berkeley?

Second, I would emphasise student housing along Oxford Street. As it is now, it is an unfriedly and dull corridor for either drivers or pedestrians. Vacant or underused land along Oxford is deep enough to accomodate housing comfortably. The orientation

and views gained by such residences would be ideal facing the hills and the parklike setting of the campus. I'm imagining a building scale similar to that along the Panhandle in San Francisco. It should have below grade parking and a mixing of ground floor retail. This would be especially appropriate from Hearst to University and from Center to Durant Streets. Of side benefit to the city is that students would add to and share in what is becoming each year a livelier downtown.

Please note that the above are my own personal views of developement in the West Side Study area. Overall, the thoughts presented by Sedway/Cooke are most appropriate. If most of the recommended growth occurs on this side of campus,it will be of city wide benefit and should be encouraged by the community.

Sincerely,

James Novosel

LEAGUE OF WOMEN VOTERS OF BERKELEY
1836 UNIVERSITY AVE., SUITE B • BERKELEY, CALIF. 94703

December 14, 1982

Mr. Harvey Z. Helfand
Campus Planner
Facilities Management
University of California
Berkeley, CA 94702

West Side Study

Dear Mr. Helfand:

The League of Women Voters commends the University for commissioning the West Side Study as a professional basis for the adoption of a long-term U.C. physical plan, and for taking the initiative to extend the scope of this study to encompass downtown Berkeley. We strongly agree with the study premise that the University should not develop in isolation from the city and we welcome these efforts to coordinate the planning and development of the University of California and the City of Berkeley.

Coming at a time when the City is working on its own plan for downtown development, the West Side Study will focus public attention on the need for a comprehensive plan for the design of downtown Berkeley and will serve as a valuable planning tool in the formulation of City policy. We urge the City not to wait for University reaction to the study recommendations, but to begin now to formulate its response to the study and to define the direction of the City's downtown plan. We also urge the University to expedite its decisions on development. The success of the physical development of Berkeley depends on continued cooperation between city and university, and on close coordination of their respective plans.

In responding to the West Side Study, we wish to point out that the League as a grassroots organization cannot comment on all of the specific choices offered in the recommendations. Our response is limited to those policies in the West Side proposal that fall within the scope of relevant League positions, adopted with member understanding and agreement, through official League studies conducted in recent years on City policies for Revenue and Taxation, Economic Development, Transportation, Zoning and Housing. However, we have tried to keep our members informed of the progress of the study, in particular through an excellent presentation made at a League meeting by U.C. planners Dorothy Walker and Harvey Helfand, and have encouraged members to state their specific preferences in individual responses.

The League strongly endorses the principle of a planned development of the City of Berkeley. We agree with the study recommendations for a higher density development of the downtown area and favor the proposed balance of uses - retail, office, research hotel and housing. Berkeley needs to enlarge and and diversify its economic base through the improvement of areas of the city zoned for commercial development. The suggested increase in commercial activities would improve the economic well-being of the city. We could see

a conference center attracting new business and adding cultural interest to the city, though careful consideration should be given to selection of a site. We would also expect research activities, whether university or private, to have the spin-off effect of developing related light industry in Berkeley. In addition, we support increasing commercial development in the downtown district rather than in the neighborhoods as a means of preserving the character of our residential districts.

Regarding the City's tax base, we have shared the public concern that university-owned property reduces the city tax roll. Expansion of off-campus university facilities for office or research needs could aggravate this situation. We are therefore very interested in the study suggestions for creative financing for development of U.C. property that could have the effect of bringing the University a viable return on its investment, providing the incentive of tax benefits for the developer, while at the same time adding to the City's tax roll the value of improvements to university property that are made for other than university use. Through such mechanisms we hope the University can reduce, or at least not increase, the present level of its tax free property in Berkeley.

The League has been a long-time advocate of meeting the housing needs of the citizens of Berkeley, especially of providing housing for people of low or moderate income. Realizing the enormous obstacles that lie in the way of achieving this aim, we strongly support U.C. efforts to provide additional housing for students and faculty. In addition, we urge the University in developing its land to look for opportunities to incorporate public housing in its off-campus projects, and to coordinate these efforts with the City, which might be able to help by providing incentives to a developer in order to promote this goal. We agree with the recommendation for infill housing on the west side of campus as a buffer zone between the commercial development of the downtown and the North Berkeley district. We favor increasing the density of housing along major transportation corridors. We strongly approve of increasing the housing stock in the downtown area by building apartment units above retail or other commercial development.

On the subject of circulation, transportation and parking policy we generally support the recommendations of the study. Favoring reduced dependence on the automobile, we support the measures taken to date by the University and the TRIP project to reduce automobile use by U.C. employees and students. Additional means should be considered by the University and the City, for example, more flexible scheduling of work hours, enhancement of bicycle paths, encouraging employers to offer employees bus transfers or other incentives in lieu of parking privileges.

-over-

We thank you for the opportunity to respond to these proposals and wish you success in implementing the study recommendations.

Sincerely yours,

Fran Packard

Fran Packard
President

Ann Crowe

Ann Crowe
Advisory Committee Representative

FP:AC:lfc

Enclosure: Copy of letter to Mayor and Council

LEAGUE OF WOMEN VOTERS OF BERKELEY
1836 UNIVERSITY AVE., SUITE B • BERKELEY, CALIF. 94703

December 14, 1982

Berkeley City Council
2180 Milvia Street
Berkeley, CA 94704

Honorable Mayor and Council,

Westside Study

We are enclosing a copy of the League's response to the draft recommendations of the U.C. Westside Study.

We urge Council not to wait for the reaction of the University but to direct staff now to draft a formal City response for earliest possible approval by Council.

We also request that Council define the direction of the City downtown plan and expedite its preparation.

We trust the City will continue to cooperate closely with the University. Coordination of city and university planning policy is vital to the success of the development of Berkeley.

Sincerely yours,

Fran Packard

Fran Packard, President

Anne Henderson

Anne Henderson, Local Government Coordinator

Enclosed: Copy of League response to Westside Study

FP/AH/mks

APPENDIX D: WEST SIDE STUDY ADVISORY COMMITTEE

The Study Advisory Committee (SAC) for the West Side Study was formed to represent various interests in the study area. Intended to be of manageable size (originally approximately 60 persons), the group met regularly with the university's planning consultant during the course of the study to provide input to identify issues and to respond to different alternatives. Composition of the group in attendance varied from meeting to meeting, with an average attendance of about 40 people.

Listed below are those individuals who were invited to serve on the SAC. There were varying degrees of individual participation, ranging from some people who did not participate at all to those who participated regularly and intensively. The affiliations listed are generally for identification purposes only, although in some cases individuals were offical representatives of their respective groups or organizations. Inclusion on this list and participation as part of the SAC does not necessarily reflect agreement or concurrence with the consultant's report and recommendations.

Within the body of the SAC was a smaller Steering Committee which met occasionally as a respresentative client groups to provide administrative direction to the planning consultant. Members of the Steering Committee are designated with an asterisk (*).

NAME	REPRESENTATION
1. Christopher L. ADAMS*	UC Systemwide Administration, Downtown Citizens Review Committee (DCRC)
2. Marie ANDERSON	DCRC, Cheese Coffee Center
3. Donald APPLEYARD	UC Berkeley City and Regional Planning
4. Carlos BALTADANO	Housing and Development Department, City of Berkeley
5. Mary Ann BEACH*	UC Systemwide Administration
6. Russell A. BEATTY	UC Conservation and Environmental Quality Committee (CEQC), UC Department of Landscape Architecture
7. Richard BENDER	College of Environmental Design
8. Hilary BENDICH	DCRC, Berkeley Transportation Commission
9. Richard V. BENNER	UC School of Business Administration
10. Richard BETTS	DCRC
11. Sharon BONNEY	Disabled Students Program (DSP), Coordinating Committee for the Removal of Architectural Barriers (CCRAB)

12. Charles H. BONNO*	DCRC, City of Berkeley Planning Commission
13. Brian BRENNAN	Downtown business community, Wells Fargo Bank
14. Caroll BRENTANO	Berkeley Architectural Heritage Association
15. Anthony BRUCE	Berkeley Architectural Heritage Association
16. James CARGES	Downtown Merchants Association, DCRC, Hink's Department Store
17. Fred COLLIGNON	UC City and Regional Planning
18. John COVENEY	Urban Ecology
19. Forrest CRAVEN	City of Berkeley, City Manager's Office
20. Anne CROWE	League of Women Voters
21. Robert DANIELSON	DCRC, downtown property owner
22. Elizabeth DEAKIN	City of Berkeley Transportation Commission
23. John H. DENTONI	Berkeley City Council
24. Tom DUNLAP	Downtown business community, Hink's Department Store
25. James EANEMAN	Berkeley Chamber of Commerce
26. Paul EISENBERG	Downtown business community, Poppy Fabrics
27. Bernon ERIKSON	Department of Finance, City of Berkeley
28. Robert FEINBAUM	Le Conte Neighborhood Association
29. Steven FINACOM	ASUC Municipal Lobby
30. Veronika FUKSON2	Berkeley City Council
31. Lee FRANK	Downtown business community, Lee Frank Jewelers
32. Marilyn A. FREEMAN	UC Transportation Services
33. Seymour FROMER	Landmarks Preservation Commission
34. Ralph GIGLIELLO	Office of UC Coordinator of Physical Planning
35. Robert M. GLAESER*	UC Biological Sciences
36. Wendy W. GLEASON2	Berkeley Planning Commission and UC student

37. Keely GRAF	Student Housing Advisory Committee
38. John HARTI	Council of Neighborhood Associations
39. Sami HASSID*	UC Buildings and Campus Development Committee (BCDC), College of Environmental Design
40. Trish HAWTHORNE	Landmarks Preservation Commission
41. Harvey Z. HELFAND*	UC Architects and Engineers, DCRC
42. Ed HENDRICKS and Chester CHOY	UC Housing, Child Care and Food Services
43. Ted HIRSHBERG	Downtown Business Association, Pettingell Bookbindery
44. Gordon JACOBY	Association of Bay Area Governments
45. Thomas. A. KOSTER*	UC Buildings and Campus Development Committee (BCDC)
46. Daniel LAMBERT	Housing Advisory and Appeals Board, City of Berkeley
47. Brian C. LEE	City of Berkeley, Public Works
48. Lloyd C. LEE	National Economic Development and Law Center
49. Jeffrey LEITER	DCRC, Berkeley Architectural Heritage Association, M. K. Estate Company
50. Ed LENERT	Student Housing Advisory Committee
51. Vera LEO	Downtown business community, Technekron, Inc.
52. Kathy LUSTIG	DCRC
53. William MANNING *	UC Athletics Projects Coordinating Committee, UC Intramural and Recreational Sports
54. David MARTIN	DCRC; Downtown business community, Martin & Martin, Attorneys
55. Kenneth MARTIN	DCRC
56. Kitty MORGAN	UC students
57. Gail MURRAY, Ride-Sharing Project Manager	Berkeley TRiP

58. Roy OAKES	Department of Public Works, City of Berkeley
59. Katharine OGDEN	BART Planning and Analysis Department
60. Henry PANCOAST	Flatlands Neighborhood Association
61. Clay PARSONS	DCRC, Parsons Associates
62. Alex PIERCE	ASUC Municipal Lobby
63. Jo Ann B. PRICE	Council of Neighborhood Associations
64. Richard REGISTER	Urban Ecology
65. Margaret Johns REYNOLDS	Downtown Business Association
66. Mary REYNOLDS*	City of Berkeley Comprehensive Planning Department
67. Deborah RITCHEY	Berkeley Board of Realtors
68. Irving RUBIN	Downtown business community, Berkely Commercial Realty
69. Stephen R. SALMON	UC Systemwide Administration, President's Office
70. Yvonne SAN JULE	Association of Bay Area Governements
71. Jack N. SCHAPPELL	UC Systemwide Administration, Treasurer's Office
72. David E. SCHLEGEL*, Dean and Associate Director	UC College of Natural Resources; UC Agriculture Experiment Station
73. Sasha SHAMSZAD (Ziba Photographics)	Downtown business community
74. Larry SHAPIRO2	Berkeley Energy Commission
75. William SHIVE	Parker-Blake Neighborhood Association
76. Arlene SILK	Berkeley Architectural Heritage Association
77. James SMITH	Downtown business community
78. Connie STAUSS*	UC Students
79. Ken STEIN	Grassroots Newspaper
80. Lisa STEPHENS*	UC Students
81. Edward S. SYLVESTER	College of Natural Resources

82.	James SWEENEY	Berkeley City Council
83.	Michael TEITZ*	City and Regional Planning, UC
84.	Walt TONEY	City Manager's Office, City of Berkeley
85.	Dorothy A. WALKER*	UC Chancellor's Office
86.	Sylvia WALLIS	ASUC Municipal Lobby, UC Students
87.	Andrea WASHBURN	Berkeley City Council
88.	John WOODBRIDGE	UC Campus Planning Study Group
89.	David YAZHARI	AC Transit Planning Department

[1]indicates request to be removed from SAC list in January 1983
[2]indicates request to be removed from SAC list in December 1982

SEDWAY/COOKE PROJECT STAFF
Thomas Cooke, Principal-in-Charge
Allan Gatzke, Project Manager
Jack Schnitzius
Patricia Smith
Sue Hyde
Greg Sutter
Juliana Pennington
Lynda Wagstaff
Faith Dunham
Pamela Bailey-Boyle

LYNN SEDWAY & ASSOCIATES
Lynn Sedway
Katie Crecelius

PRC VOORHEES
Nick Bevilacqua
Michael Meyer